World Logistics Center

WORLD LOGISTICS CENTER

Revised Sections of the Final Environmental Impact Report

Moreno Valley, California

State Clearinghouse No. 2012021045

Prepared for:

City of Moreno Valley

July 2018

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550 West C Street, Suite 750
San Diego, CA 92101
619.719.4200
www.esassoc.com

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Table of Contents

		Page
1.0	Executive Summary	1-1
2.0	Introduction and Purpose	2-1
2.1	Document Format	2-2
2.2	Process for Revised Sections of the FEIR	2-3
2.3	Incorporated Documents	2-4
2.4	Technical Reports	2-5
2.5	Public Review of the Revised Sections of the FEIR	2-6
2.6	Mitigation Monitoring and Reporting Program	2-7
2.7	Potential Impacts of the Project Discussed in the Revised Sections of the FEIR	2-7
2.8	Cumulative Impacts	2-8
3.0	Project Description	3-1
4.0	Environmental Impact Evaluation	4-1
4.1	Aesthetics	4.1-1
4.2	Agricultural and Forestry Resources	4.2-1
4.3	Air Quality	4.3-1
4.4	Biological Resources	4.4-1
4.5	Cultural and Paleontological Resources	4.5-1
4.6	Geology and Soils	4.6-1
4.7	Greenhouse Gas Emissions, Climate Change, and Sustainability	4.7-1
4.8	Hazards and Hazardous Materials	4.8-1
4.9	Hydrology and Water Quality	4.9-1
4.10	Land Use and Planning	4.10-1
4.11	Mineral Resources	4.11-1
4.12	Noise	4.12-1
4.13	Population, Housing, and Employment	4.13-1
4.14	Public Services and Facilities	4.14-1
4.15	Traffic and Circulation	4.15-1
4.16	Utilities and Service Systems	4.16-1
4.17	Energy	4.17-1
5.0	Other CEQA Topics	5-1
6.0	Cumulative Impacts	6-1
6.1	Aesthetics	6.1-1
6.2	Agricultural and Forestry Resources	6.2-1
6.3	Air Quality	6.3-1
6.4	Biological Resources	6.4-1
6.5	Cultural and Paleontological Resources	6.5-1
6.6	Geology and Soils	6.6-1
6.7	Greenhouse Gas Emissions, Climate Change and Sustainability	6.7-1
6.8	Hazards and Hazardous Materials	6.8-1
6.9	Hydrology and Water Quality	6.9-1
6.10	Land Use and Planning	6.10-1
6.11	Mineral Resources	6.11-1
6.12	Noise	6.12-1
6.13	Population, Housing, Employment	6.13-1
6.14	Public Services and Facilities	6.14-1
6.15	Traffic and Circulation	6.15-1
6.16	Utilities and Service Systems	6.16-1
6.17	Energy	6.17-1
7.0	Alternatives to the Proposed Project	7-1
8.0	References	8-1
9.0	List of Preparers	9-1

Appendices

A. Air Quality/GHG and Health Risk Assessment Technical Report (Revised)
B. Biological Resources Technical Memorandum (Revised) and DBESP
C. Hydrology/Water Quality Technical Memorandum
D. Noise Analysis Technical Report (Revised)
E. Renewable Energy Technical Report (New)
F. Traffic Impact Assessment Technical Report (Revised)

List of Figures

3-1 Specific Plan Land Uses ... 3-3
4.2-1 State Designated Farmland ... 4.2-4
4.3-1 SCAQMD Monitoring Stations ... 4.3-7
4.3-2 Existing Sensitive Receptors ... 4.3-8
4.3-3 Incremental Project Cancer Risk – No Mitigation (Construction and Operation) ... 4.3-70
4.3-4 Incremental Project Cancer Risk – No Mitigation (30 Year of Full Operation) ... 4.3-71
4.3-5 Incremental Project Cancer Risk – With Mitigation (Const. and Operation) ... 4.3-76
4.3-6 Incremental Project Cancer Risk – With Mitigation (30 Year of Full Operation) ... 4.3-77
4.4.1 Vegetation Communities ... 4.4-4
4.4.2 Drainage Features ... 4.4-5
4.4.3 MSHCP Areas ... 4.4-14
4.4.4 MSHCP Conservation Areas ... 4.4-41
4.4.5 Burrowing Owl Habitat Suitability ... 4.4-47
4.7.1 Uncapped Project GHG Emissions at Buildout ... 4.7-29
4.12-1 Typical A-Weighted Noise Levels ... 4.12-3
4.12-2 Noise Measurement Locations ... 4.12-6
4.12-3 Onsite Plot Locations ... 4.12-19
4.12-4 Offsite Construction Locations ... 4.12-28
4.15-1 Study Roadway Segment Locations ... 4.15-4
4.15-2 Study Intersection Locations ... 4.15-5
4.15-3 Freeway Segment Locations ... 4.15-6
4.15-4 Freeway Segment Locations to the Ports of Los Angeles and Long Beach ... 4.15-7
4.15-5 Roadway Improvements Assumed for 2025 ... 4.15-27
6.0 Cumulative Projects Legend ... 6-5
6.0 Cumulative Projects Index Map ... 6-6
6.0 Cumulative Projects Map Page 1 of 9 ... 6-7
6.0 Cumulative Projects Map Page 2 of 9 ... 6-8
6.0 Cumulative Projects Map Page 3 of 9 ... 6-9
6.0 Cumulative Projects Map Page 4 of 9 ... 6-10
6.0 Cumulative Projects Map Page 5 of 9 ... 6-11
6.0 Cumulative Projects Map Page 6 of 9 ... 6-12
6.0 Cumulative Projects Map Page 7 of 9 ... 6-13
6.0 Cumulative Projects Map Page 8 of 9 ... 6-14
6.0 Cumulative Projects Map Page 9 of 9 ... 6-15
6.1-1 Aesthetics Cumulative Projects Area ... 6.1-3
6.2-1 Agricultural Cumulative Projects Area ... 6.2-3
6.3-1 Air Quality Cumulative Projects Area ... 6.3-3
6.4-1 Regional Biological Resource Cumulative Projects Area ... 6.4-3
6.4-2 Local Biological Resource Cumulative Projects Area ... 6.4-4
6.5-1 Cultural and Paleontological Resources Cumulative Projects Area ... 6.5-3
6.6-1 Geology and Soils Cumulative Projects Area ... 6.6-3
6.8-1 Hazards and Hazardous Materials Cumulative Projects Area ... 6.8-3
6.9-1 Hydrology and Water Quality Cumulative Projects Area ... 6.9-3
6.9-2 Groundwater Cumulative Projects Area ... 6.9-4
6.10-1 Land Use and Planning Cumulative Projects Area ... 6.10-3
6.12-1 Construction Noise Cumulative Projects Area ... 6.12-3
6.12-2 Operational Noise Cumulative Projects Area ... 6.12-4
6.13-1 Population, Housing, Employment Cumulative Projects Area ... 6.13-3
6.14-1 Police Fire, Parks/Recreation Cumulative Projects Area ... 6.14-3
6.14-2 Schools Cumulative Projects Area ... 6.14-4
6.15-1 Traffic and Circulation Cumulative Projects Area ... 6.15-4
6.16-1 Water and Wastewater Cumulative Projects Area ... 6.16-3
6.16-2 Solid Waste Landfill Cumulative Projects Area ... 6.16-4
6.17-1 Energy Cumulative Projects Area ... 6.17-3

List of Tables

1.1 World Logistics Center Project Environmental Impact Summary 1-4
3.1 Estimated Construction Equipment and Phasing (2020–2035) 3-4
4.2-1 Agricultural Production at World Logistics Center Site 4.2-3
4.2-2 LESA Model Significance Determination 4.2-11
4.3-1 Ambient Air Quality Standards 4.3-3
4.3-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin 4.3-5
4.3-3 Ambient Air Quality Monitored in the Project Vicinity 4.3-6
4.3-4 Toxic Air Contaminant Concentration Levels and Associated Health Effects (Riverside, California) 4.3-14
4.3-5 Exposure Assumptions for Cancer Risk 4.3-25
4.3-6 Parameter Values 4.3-27
4.3-7 California Age Breakdown in 2010 ..... 4.3-28
4.3-8 Carbon Monoxide Concentrations at Intersections, 2025 ..... 4.3-34
4.3-9 Carbon Monoxide Concentrations at Intersections, 2040 ..... 4.3-35
4.3-10 Short-Term Regional Construction Emissions–Without Mitigation 4.3-38
4.3-11 Short-Term Regional 24-hour Concrete Pour Emissions–Without Mitigation 4.3-40
4.3-12 Mitigated Short-Term Regional Construction Emissions 4.3-43
4.3-13 Localized Assessment of Project Phase 1 (2018) Emissions Maximum Impacts Within the Project Boundaries (without mitigation) 4.3-46
4.3-14 Localized Assessment of Project Phase 1 (2018) Emissions Maximum Impacts Outside of the Project Boundaries (without mitigation) 4.3-46
4.3-15 Localized Assessment of Project Phase 1 and Phase 2 Full Build Out (2018) Emissions Maximum Impacts Within the Project Boundaries (without mitigation) 4.3-47
4.3-16 Localized Assessment of Project Phase 1 and Phase 2 Full Build Out (2018) Emissions Maximum Impacts Outside the Project Boundaries (without mitigation) 4.3-47
4.3-17 Localized Assessment – Construction and Operation, Year 2025 Maximum Impacts Within the Project Boundaries (without Mitigation) 4.3-49
4.3-18 Localized Assessment – Construction and Operation, Year 2025 Maximum Impacts Outside the Project Boundaries (without Mitigation) 4.3-50
4.3-19 Localized Assessment – Construction and Operation, Year 2032 Maximum Impacts Within the Project Boundaries (without Mitigation) 4.3-51
4.3-20 Localized Assessment – Construction and Operation, Year 2032 Maximum Impacts Outside the Project Boundaries (without Mitigation) 4.3-51
4.3-21 Localized Assessment – Project Operation Full Build Out, Year 2040 Maximum Impacts Within the Project Boundaries (without Mitigation) 4.3-52
4.3-22 Localized Assessment – Project Operation, Year 2040 Maximum Impacts Outside of the Project Boundaries (without Mitigation) 4.3-52
4.3-23 Comparison of Local Project Air Quality Impacts Before and After Mitigation 4.3-55
4.3-24 Operational Regional Air Pollutant Emissions (Worst-Case Scenario) 4.3-56
4.3-25 Operational Regional Air Pollutant Emissions (Detail, Unmitigated) 4.3-58
4.3-26 Operational Regional Air Pollutant Emissions (Year by Year, pounds per day, unmitigated) 4.3-59
4.3-27 Combined Construction and Operational Regional Air Pollutant Emissions (Year by Year, pounds per day, unmitigated) 4.3-60
4.3-28 Operational Regional Air Pollutant Emissions (Mitigated) 4.3-62
4.3-29 Combined Construction and Operational Regional Air Pollutant Emissions (Year by Year, pounds per day) – Mitigated 4.3-63
4.3-30 Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Construction (Construction and Operation HRA), Without Mitigation 4.3-67

List of Tables (continued)

4.3-31 Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Full Operation in 2040, Without Mitigation 4.3-68
4.3-32 Estimates of Various Morbidity Health Endpoints from Project Emissions Without Mitigation 4.3-72
4.3-33 Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Construction (Construction and Operation HRA), With Mitigation 4.3-74
4.3-34 Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Full Operation in 2040, With Mitigation 4.3-75
4.3-35 Summary of Project-Related Air Quality Impacts 4.3-80
4.4-1 Summary of Onsite and Offsite Improvement Area Vegetation 4.4-7
4.4-2 Sensitive Plant Species in the WLC site 4.4-16
4.4-3 Sensitive Wildlife Species in the WLC Site 4.4-21
4.4-4 MSHCP Criteria Cells within the WLC Site Study Area 4.4-38
4.4-5 General Plan and Municipal Code Biological Resources Policies 4.4-59
4.4-6 Endangered/Threatened Species Within the WLC site 4.4-65
4.4-7 Noise Levels along the WLC Site Southern Boundary 4.4-67
4.7-1 SCAG Assumptions for Moreno Valley 4.7-15
4.7-2 Construction Greenhouse Gas Emissions (without mitigation) 4.7-21
4.7-3 Annual Project Operational GHG Emissions (Worst-Case 2018 Analysis at Buildout) 4.7-22
4.7-4 Project GHG Emissions at Buildout by GHG (Unmitigated) 4.7-23
4.7-5 Project GHG Emissions (Year by Year without Mitigation) 4.7-24
4.7-6 Greenhouse Gas Emissions Reduction Analysis 4.7-30
4.7-7 GHG Reductions at Buildout (with Mitigation) 4.7-33
4.7-8 Project GHG Emissions (Year by Year with Mitigation) 4.7-34
4.7-9 California and SCAQMD Electric Vehicle (EV) Penetration Estimates 4.7-36
4.7-10 Project GHG Emissions (Year by Year with Mitigation and Medium EV Penetration) – Scoping Plan Scenario, For Informational Purposes Only 4.7-37
4.7-11 Project Compliance with Federal/State Greenhouse Gas Reduction Strategies 4.7-39
4.7-12 Analysis of Additional Measures in the 2017 Scoping Plan Update 4.7-42
4.7-13 Consistency with City General Plan Air Quality Policies 4.7-43
4.7-14 Consistency with City Climate Action Strategy 4.7-43
4.12-1 Existing Ambient Noise Measurements (dBA L_{eq}) 4.12-5
4.12-2 Existing Traffic Noise Levels (CNEL dBA) 4.12-7
4.12-3 Maximum Continuous Sound Levels 4.12-11
4.12-4 Maximum Impulsive Sound Levels 4.12-11
4.12-5 Maximum Non-Impulsive Sound Levels (in dBA) 4.12-11
4.12-6 Stationary Source Land Use Standards 4.12-13
4.12-7 Reference Construction Equipment Noise Levels 4.12-17
4.12-8 Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB) 4.12-20
4.12-9 Increase Over Ambient Along Local Roadways During Project Construction 4.12-27
4.12-10 Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB) 4.12-29
4.12-11 Existing Year (2018) Plus Project Buildout Traffic Noise Levels (dBA) 4.12-37
4.12-12 Phase I (2025) Plus Project Traffic Noise Levels (dBA) 4.12-38
4.12-13 Buildout Year (2040) Plus Project Traffic Noise Levels (dBA) 4.12-39
4.15-1 Traffic Level of Service Definitions 4.15-8
4.15-2 City of Moreno Valley Level of Service Criteria for Roadway Segments 4.15-8
4.15-3 Riverside County LOS Thresholds for Surface Streets 4.15-9
4.15-4 Level of Service Criteria for Unsignalized and Signalized Intersections 4.15-9

List of Tables (continued)

4.15-5 Level of Service Criteria for Freeway Segments 4.15-10
4.15-6 Existing (2018) Intersection Levels of Service 4.15-13
4.15-7 Existing (2018) Roadway Segment Levels of Service 4.15-16
4.15-8 Existing (2018) Freeway Mainline Levels of Service 4.15-17
4.15-9 Existing (2018) Freeway Weaving Segment Levels of Service 4.15-19
4.15-10 Existing (2018) Freeway Ramp Levels of Service 4.15-20
4.15-11 Analysis Scenarios 4.15-28
4.15-12 Trip Generation Rates - Proposed and Existing Land Uses 4.15-29
4.15-13 Project Trips Generated by Proposed and Existing Land Uses 4.15-30
4.15-14 Project Trips by Vehicle Type 4.15-30
4.15-15 Year 2025 Without Project Intersection Levels of Service 4.15-36
4.15-16 Year 2025 Without Project Roadway Levels of Service 4.15-39
4.15-17 Year 2025 Without Project Freeway Mainline Levels of Service 4.15-41
4.15-18 Year 2025 Without Project Freeway Weaving Levels of Service 4.15-44
4.15-19 Year 2025 Without Project Freeway Freeway Ramp Levels of Service 4.15-45
4.15-20 Intersection LOS Standards by Jurisdiction 4.15-47
4.15-21 Intersection LOS under Existing Plus Phase 1 Scenario 4.15-53
4.15-22 Existing Plus Phase 1 Road Segment Impacts and Mitigations 4.15-60
4.15-23 Existing Plus Phase 1 Freeway Mainline LOS 4.15-62
4.15-24 Existing Plus Phase 1 Freeway Mainline Impacts and Mitigations 4.15-66
4.15-25 Existing Plus Phase 1 Freeway Weaving Section LOS 4.15-67
4.15-26 Existing Plus Phase 1 Freeway Weaving Impacts and Mitigations 4.15-69
4.15-27 Existing Plus Phase 1 Freeway Ramp LOS 4.15-70
4.15-28 Existing Plus Phase 1 Freeway Ramp Impacts and Mitigations 4.15-71
4.15-29 Existing (2018) Plus Project Intersection Levels of Service 4.15-74
4.15-30 Existing (2018) Plus Project Intersection Impacts and Mitigations 4.15-80
4.15-31 Existing (2018) plus Project Roadway Segment Levels of Service 4.15-82
4.15-32 Existing (2018) plus Project Freeway Mainline Levels of Service 4.15-83
4.15-33 Existing (2018) plus Project Freeway Weaving Segments Levels of Service 4.15-88
4.15-34 Existing (2018) plus Project Freeway Ramps Levels of Service 4.15-91
4.15-35 Year 2025 plus Phase 1 Intersection Levels of Service (A.M. Peak Hour) 4.15-95
4.15-36 Year 2025 plus Phase 1 Intersection Levels of Service (P.M. Peak Hour) 4.15-97
4.15-37 2025 Plus Phase 1 Road Segment Impacts and Mitigations 4.15-100
4.15-38 2025 Plus Phase 1 Freeway Mainline Level of Service 4.15-102
4.15-39 Projects Using DIF and TUMF in Combination with Other Funding Sources 4.15-112
4.15-40 Existing plus Project Direct Impacts and Mitigation Measures on Roadway Segments 4.15-115
4.15-41 Existing plus Project Direct Impacts and Mitigation Measures on Intersections 4.15-120
4.15-42 Existing Plus Project Freeway Impacts and Mitigations 4.15-127
4.15-43 Summary of Project-Related Traffic Impacts 4.15-134
4.17-1 EV Charging Station Requirements at WLC 4.17-15
4.17-2 WLC Project Construction Electricity Use 4.17-25
4.17-3 WLC Project Construction Fuel Usage 4.17-26
4.17-4 WLC Project Operational Electricity Usage 4.17-28
4.17-5 WLC Project Annual Peak Demand 4.17-30
4.17-6 WLC Project Operational Natural Gas Usage in Buildings 4.17-31
4.17-7 WLC Project Operational Fuel Usage 4.17-32
4.17-8 Scenario A: Low EV Penetration Charging Loads 4.17-33
4.17-9 Scenario B: Medium EV Penetration Charging Loads 4.17-33
4.17-10 Scenario C: High EV Penetration Charging Loads 4.17-33
4.17-11 Natural Gas Use from Transportation 4.17-35
6.0-1 Local and Regional Growth Projections for Moreno Valley and County of Riverside (2012–2040) 6-3
6.0-2 List of Cumulative Projects 6-17

List of Tables (continued)

6.1-1 Aesthetics Cumulative Projects Summary 6.2-4
6.2-1 Agricultural and Forestry Resources Cumulative Projects Summary 6.2-4
6.3-1 Air Quality Cumulative Projects Summary 6.3-4
6.3-2 Air Quality Cumulative Operation Emissions 6.3-24
6.4-1 Biological Resource Cumulative Project Summary 6.4-5
6.5-1 Cultural and Paleontological Resources Cumulative Projects Summary 6.5-4
6.6-1 Geology and Soils Cumulative Projects Summary 6.6-4
6.7-1 Greenhouse Gas Emissions, Climate Change and Sustainability Cumulative Projects Summary 6.7-4
6.8-1 Hazards and Hazardous Material Cumulative Projects Summary 6.8-4
6.9-1 Hydrology and Water Quality Cumulative Projects Summary 6.9-5
6.9-2 Water Quality Cumulative Projects Summary 6.9-22
6.9-3 Pollutant Stressors in Receiving Waters 6.9-31
6.10-1 Land Use and Planning Cumulative Projects Summary 6.10-4
6.12-1 Noise Cumulative Projects Summary 6.12-5
6.12-2 Cumulative Construction Noise Impacts - Unmitigated 6.12-25
6.12-3 Cumulative Construction Noise Impacts – Mitigated Project 6.12-26
6.12-4 Cumulative Impact for Phase 1 (2025) Plus Project Traffic Noise Levels (dBA) .. 6.12-27
6.12-5 Cumulative Impact for Buildout (2040) Plus Project Traffic Noise Levels (dBA) .. 6.12-28
6.12-6 Cumulative On-Site Operational Noise Impacts – Unmitigated Project 6.12-30
6.13-1 Population, Housing, and Employment Cumulative Project Summary 6.13-4
6.14-1 Public Services (Police, Fire, and Parks) Cumulative Projects Summary 6.14-5
6.14-2 Public Services (Schools) Cumulative Projects Summary 6.14-16
6.15-1 Traffic and Circulation Cumulative Projects Summary 6.15-5
6.15-2 Cumulative Impacts to Roadway Sections and Mitigation Measures 6.15-31
6.15-3 Cumulative Intersection Impacts and Mitigation Measures 6.15-32
6.16-1 Water and Wastewater Cumulative Projects Summary 6.16-5
6.16-2 Solid Waste Cumulative Projects Summary 6.16-21
6.17-1 Energy Cumulative Projects Summary 6.17-4

NOTE TO READERS: The Revised Sections of the Final EIR (FEIR) sets forth those portions of Section 1.0 that have been revised. Revisions to, and deletions from, the FEIR have been identified in a separate document, available for review at the City of Moreno Valley. The absence of any reference to a portion of Section 1.0 means that the corresponding portion of Section 1.0 in the FEIR remains unchanged. However, where appropriate, unrevised portions of the FEIR have been included for ease of understanding. The absence of reference to a portion of Section 1.0 means that the corresponding portion of Section 1.0 in the FEIR remains unchanged or has been deleted.

1.0 EXECUTIVE SUMMARY

In August, 2015, the City Council of the City of Moreno Valley certified a Final Environmental Impact Report (the "FEIR") as complying with the California Environmental Quality Act (CEQA). The FEIR had been prepared to analyze the environmental impacts that could result from the construction and operation of the World Logistics Center. Several lawsuits were filed challenging the adequacy of the FEIR.

In February, 2018, a judge of the Riverside County Superior County issued a ruling which identified five deficiencies in the FEIR. In June, 2018, a judgement was entered and a writ issued which ordered the City to set aside the certification of the FEIR. This document, referred to as the Revised Sections of the FEIR, has been prepared to correct the deficiencies identified in the February ruling. The Revised Sections of the FEIR will be circulated for public comment. Those portions of the FEIR which were found to be have been in compliance with CEQA will not be circulated and no further comments on them will be sought. Responses to comments on the Revised Sections of the FEIR will be prepared. A revised FEIR, consisting of the Revised Sections of the FEIR, the comments and responses and portions of the FEIR which were found to have been in compliance with CEQA, will then be considered by the City to determine if the Revised FEIR should be certified as complying with CEQA.

The development of the World Logistics Center is subject to the regulations and development standards contained in the existing World Logistics Center Specific Plan which authorizes the construction of 40,600,000 square feet of logistics facilities and associated infrastructure. The Revised FEIR, once certified, will be used in conjunction with the discretionary approvals required for the development of the World Logistics Center, including, but not limited to, subdivision maps, plot plan approvals, and annexation of land, currently in unincorporated Riverside County, into the City.

The Revised Sections of the FEIR have been prepared to address each of the deficiencies identified in the court's ruling, summarized as follows:

- **Energy Impacts**: "The FEIR must provide a comparison of feasible, cost-effective renewable energy technologies in the Energy Impacts analysis".
- **Biological Impacts**: "The FEIR should remove all references to and consideration of the 910 acres of SJWA and MSHCP lands as "buffer zone" or "CDFW Conservation Buffer Area" in the Biological Resources and Habitat Impacts analysis".
- **Noise Impacts**: "The FEIR must provide an analysis of construction noise over ambient levels; provide adequate analysis on construction noise impacts on nearby homes; address the inadequacy of mitigation measures, which fail to include performance standards or ways to reduce construction noise".
- **Agricultural Impacts**: "The FEIR and the resolution certifying the FEIR require clarification as to whether loss of locally important farmland will have a significant direct or cumulative impact on agriculture and, if significant, the FEIR must either explain how proposed mitigation will reduce the impact or why other mitigation is not feasible".

- **Cumulative Impacts**: "The FEIR should include consideration of recently constructed and proposed large warehouse projects in the summary of projections method, and should analyze whether individually significant impacts may be cumulative considerable".

The Revised Sections of the FEIR responds to the deficiencies as follows:

- **Energy Impacts**: A new Energy Impact Assessment technical report has been prepared, and a new Energy section added, to provide a comparison of cost- effective renewable energy technologies and associated energy conservation features. This includes an evaluation of all potential renewable energy source options, the feasibility of incorporating these options into the project to reduce overall energy consumptions and to reduce greenhouse gas emissions.
- **Biological Impacts**: A new Biological Resource technical memo has been prepared to document current biological resources on the World Logistics Center site. The Biological Resource section has been updated to remove any reference to the 910-acre "buffer" and "CDFW Conservation Buffer". The entire project site has been resurveyed to document existing biological resources, sensitive species and to update the biological Resource Technical Report.
- **Noise Impacts**: The Noise technical report and section have been updated to include an updated analysis of construction impacts and mitigation measures focused on the onsite and adjacent residential land uses. In addition, overall noise operational mobile and stationary source noise impacts and mitigation measures have been updated.
- **Agricultural Impacts**: The Agricultural section has been updated to accurately reflect the status of the agricultural resources found on the World Logistics Center site.
- **Cumulative Impacts**: The cumulative impact sections of the FEIR have been updated to function as a stand-alone section and to add recently constructed and proposed warehouse facilities to the summary of projections and list method to determine cumulative impacts. In order to complete the updated cumulative impact assessment, certain project level analysis (air quality/greenhouse gases, traffic) was completed to form the basis for the cumulative impact analysis. The project level analysis is included in the body of this Revised Sections of the FEIR and associated technical studies are included in the appendices for reference. Extensive research has been completed to identify 361 cumulative projects in the City of Moreno Valley and surrounding jurisdictions, including the Cities of Riverside, Perris, Hemet, San Jacinto, Redlands Beaumont, as well as the Counties of Riverside and San Bernardino, and the March Joint Powers Authority (JPA). These identified projects form the basis of the cumulative project list to be evaluated in Section 6.0.

In addition, although not required by the court ruling, the following analysis has been updated or newly prepared to assist in the response to the deficiencies identified by the court:

- The Air Quality assessment has been updated based upon the updated traffic study to provide the current baseline for the updated cumulative impact analysis.
- The Greenhouse Gas / Climate Change Assessment has been updated based upon the updated traffic study to provide the current baseline for the updated cumulative impact analysis
- The Traffic Impact assessment has been updated to provide the current baseline traffic conditions for the updated air quality, greenhouse gas/climate change, noise, and cumulative impact analysis.

Only the above outlined revised information is contained in this Revised Sections of the FEIR, all other sections of the FEIR and technical studies remain valid, and are available for review at the City of Moreno Valley. A highlight/strikeout version of the Revised Sections of the FEIR is available for review at the City of Moreno Valley, which shows all changes made to the document.

The following Sections of the FEIR remain valid and are not included in the Revised Sections of the FEIR, except for the cumulative impact chapter: Aesthetics, Cultural Resources, Geology and Soils,

Hazard and Hazardous Materials, Hydrology, Land Use and Planning, Mineral Resources, Population and Housing, and Public Services and Utilities.

Portions of the following Sections of the FEIR have been revised and are included in the Revised Sections of the FEIR: Agriculture and Forestry Resources, Air Quality, Greenhouse Gas/Climate Change/Sustainability, Land Use and Planning, Noise, and Traffic and Circulation.

The following Sections of the FEIR have been entirely replaced with new sections in the Revised Sections of the FEIR: Biological Resources and Energy (new stand-alone sections).

The Revised Sections of the Final EIR are being circulated for additional public review. The 45-day public review period is from July 25, 2018 through September 7 ,2018. All comments received on the Revised Sections of the FEIR will be responded to and incorporated into a response to comments document, which will be considered by the City at a public hearing to certify that the Revised Sections of the FEIR is in compliance with CEQA. The Revised Sections of the FEIR is also available for review on the City of Moreno Valley's website (www.moval.org).

Please submit comments on the Revised Sections of the FEIR no later than 4:30 PM, September 7, 2018 to:

Albert Armijo
Interim Planning Manager
City of Moreno Valley
14177 Frederick Street
P.O. Box 88055
Moreno Valley, CA 92552-0805
alberta@moval.org

Table 1.0-1 summarizes the mitigation measures from the FEIR and the Revised Sections of the FEIR, and identifies project impacts, mitigation measures and level of significance with mitigation for each of the seventeen environmental factors evaluated in the FEIR and Revised Sections of the FEIR.

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
4.1 Aesthetics			
LESS THAN SIGNIFICANT IMPACTS			
None	Not applicable		Not applicable
SIGNIFICANT IMPACTS			
Impact 4.1.6.1 Scenic Vistas			
The WLC project will significantly impact viewsheds in the area, including views of the Mt. Russell Range and the Badlands.	**4.1.6.1A**	Each Plot Plan application for development along the western, southwestern, and eastern boundaries of the project (i.e., adjacent to existing or planned residential zoned uses) shall include a minimum 250-foot setback measured from the City/County zoning boundary line and any building or truck parking/access area within the project. The setback area shall include landscaping, berms, and walls to provide visual screening between the new development and existing residential areas upon maturity of the landscaping materials. The existing olive trees along Redlands Blvd. shall remain in place as long as practical to help screen views of the project site. This measure shall be implemented to the satisfaction of the Planning Official.	Significant and Unavoidable
	4.1.6.1B	Each Plot Plan application for development adjacent to Redlands Boulevard, Bay Avenue, or Merwin Street, shall include a plot plan, landscaping plan, and visual rendering(s) illustrating the appearance of the proposed development. The renderings shall demonstrate that views of proposed buildings and trucks can be reasonably screened from view from existing residents upon maturity of planned landscaping and to ensure consistency with the General Plan Objective 7.7. "Effective" screening shall mean that no more than the upper quarter (25%) of a building is visible from existing residences, which shall be achieved through a combination of landscaping, berms, fencing, etc. The location and number of view presentations shall be at the discretion of the Planning Division.	
	4.1.6.1C	Prior to the issuance of a certificate of occupancy for buildings adjacent to the western, southwestern, and eastern boundaries of the project (i.e., adjacent to existing residences at the time of application) the screening required in Mitigation Measure 4.1.6.1A shall be installed in substantial conformance with the approved plans to the satisfaction of the Planning Official.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
	4.1.6.1D	Prior to the issuance of permits for any development activity adjacent to Planning Area 30 (74.3 acres in the southwest portion of the Specific Plan), the entirety of Planning Area 30 shall be offered to the State of California for open space purposes. In the event that the State does not accept the dedication, the property shall be offered to Western Riverside County Regional Conservation Authority or an established non-profit land conservancy for open space purposes. In the event that none of these organizations accepts the dedication, the property may be dedicated to a property owner's association or may remain in private ownership and may be fenced and access prohibited.	
Impact 4.1.6.2 Scenic Resources and Scenic Highways			
The WLC project will significantly impact existing viewsheds from SR-60 which is a locally designated scenic route.	Previously referenced Mitigation Measures 4.1.1.6A through 4.1.16D		Significant and Unavoidable
Impact 4.1.6.3 Existing Visual Character and its Surroundings			
The WLC project will fundamentally change views of the area from agriculture to large warehouses.	**4.1.6.3A**	Each Plot Plan application for development shall include plans and visual rendering(s) illustrating any changes in views of Mount Russell and/or the Badlands, for travelers along SR-60, as determined necessary by the Planning Official. The plans and renderings shall illustrate typical views based on project plans, with the location and number of view presentations to be determined by the Planning Official. These views shall be simulated from a height of six feet from the edge of the roadway travel lane closest to the visual resource. The renderings must demonstrate that the development will preserve at least the upper two thirds (67%) of the vertical view of Mt. Russell from SR-60.	Significant and Unavoidable
Impact 4.1.6.4 Light and Glare			
The WLC project will significantly impact the area by substantially increasing lighting and glare in the area.	**4.1.6.4A**	Each Plot Plan application for development adjacent to residential development shall include a photometric plot of all proposed exterior lighting demonstrating that the project is consistent with the requirements of Section 9.08.100 of the City Municipal Code. The lighting study shall indicate the expected increase in light levels at the property lines of adjacent residential uses. The study shall demonstrate that the proposed lighting fixtures and/or visual screening meet or exceed City standards regarding light impacts.	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	4.1.6.4B Each Plot Plan application for development shall include an analysis of all proposed solar panels demonstrating that glare from panels will not negatively affect adjacent residential uses or negatively affect motorists along perimeter roadways. Design details to meet these requirements shall be implemented to the satisfaction of the Planning Official.	
Cumulative Aesthetic Impacts		
The cumulative effect of development in the region will continue to modify existing viewsheds, especially along SR-60. Cumulative impacts would remain significant and unavoidable.	Previously referenced Mitigation Measures 4.1.6.1A through 4.1.6.1D, 4.1.6.4A and 4.1.6.4B	Significant and Unavoidable
4.2 Agriculture		
LESS THAN SIGNIFICANT IMPACTS		
Forest Land Zoning		
There are no significant impacts because there are no areas designated as forest land or timberland on the project site.	No mitigation is required.	No Impact
Loss or Conversion of Forest Land		
There are no forest lands on the project site or in the surrounding area.	No mitigation is required.	No Impact
Existing Zoning and Williamson Act		
There are no Williamson Act Contracts on or adjacent to the project site.	No mitigation is required.	No Impact

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Farmland Conversion		
The project will not convert Unique Farmland by the state to urban uses.	No mitigation is required.	No Impact
Impact 4.2.6.2 Conversion of Farmland to Non-Agricultural Uses		
The project will convert 2,610 acres of Farmland of Local Importance to urban uses.	No mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
None		No Impact
Cumulative Agricultural Impacts		
As urban development continues in the City and surrounding areas, there will be a cumulative loss of agricultural land through conversion to urban uses. This conversion is a long-established historical process based on local and regional economic conditions, resulting in the eventual relocation of farming to more rural and outlying areas (e.g., Coachella Valley, Kern County, etc.).	**6.2.1:** Prior to the issuance of any grading permit affecting land designated as "Farmland of Local importance" (Figure 4.2.2 in the World Logistics Center Environmental Impact Report), an Agricultural Conservation Easement shall be recorded over land of equivalent or better agricultural economic productivity of the offsite easement property compared to the World Logistics Center property. The analysis shall include a comparison of the project's "Farmland of Local Significance" considering its relative economic potential as the best measure of productivity (i.e., net profitability per acre or potential net rental income per acre). It shall include a consideration of various important physical factors including location and accessibility, soils and topography, micro and macro climatic conditions, water availability and quality, as well as local practices, good farm management and cultural (growing) costs. The form and content of this easement, as well as the estimates of agricultural productivity, shall be reviewed and approved in advance by the Planning Official.	Less than Significant with Mitigation
4.3 Air Quality		
LESS THAN SIGNIFICANT IMPACTS		
Odors		
The project involves large warehouses and no uses that would generate substantial odors. The natural	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
gas facilities on site sometimes generate temporary odors from natural gas blow-offs, but these are not considered significant impacts.		
Long-Term Microscale (CO Hot Spot) Emissions		
The project air quality study determined that project-related traffic would not create any CO hot spots on local roadways through project buildout.	No mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
Impact 4.3.6.1 Air Quality Management Plan Consistency		
The land uses of the project are not consistent with those used to prepare the most current AQMP. Although the project would substantially improve the jobs/housing balance of the City by introducing more employment-generating uses than new housing, it would exceed applicable thresholds for all criteria pollutants, with the exception of SO_X. Despite the implementation of mitigation measures for both construction and operation, emissions associated with the project cannot be reduced below applicable SCAQMD thresholds.	Implementation of Mitigation Measures 4.3.6.2A through 4.3.6.2D, 4.3.6.3A through 4.3.6.3D, and 4.3.6.4A, will help reduce air pollutant emissions of the project, but it will still be inconsistent with the AQMP.	Significant and Unavoidable
Impact 4.3.6.2 Construction Equipment Exhaust Emissions		
Future development within the WLCSP will exceed daily air pollutant significance criteria established by the SCAMQD for construction-related activities.	**4.3.6.2A** Construction equipment maintenance records (including the emission control tier of the equipment) shall be kept on site during construction and shall be available for inspection by the City of Moreno Valley. a) Off-road diesel-powered construction equipment greater than 50 horsepower shall meet United States Environmental Protection Agency Tier 4 off-road emissions standards. A copy of each unit's certified tier specification shall be available for inspection by the City at the time of mobilization of each applicable unit of equipment. b) During all construction activities, off-road diesel-powered equipment may be in the "on" position not more than 10 hours per day.	Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		c) Construction equipment shall be properly maintained according to manufacturer specifications. d) All diesel powered construction equipment, delivery vehicles, and delivery trucks shall be turned off when not in use. On-site idling shall be limited to three minutes in any one hour. e) Electrical hook ups to the power grid shall be provided for electric construction tools including saws, drills and compressors, where feasible, to reduce the need for diesel-powered electric generators. Where feasible and available, electric tools shall be used f) The project shall demonstrate compliance with South Coast Air Quality Management District Rule 403 concerning fugitive dust and provide appropriate documentation to the City of Moreno Valley. g) All construction contractors shall be provided information on the South Coast Air Quality Management District Surplus Off-road Opt-In "SOON" funds which provides funds to accelerate cleanup of off-road diesel vehicles. h) Construction on-road haul trucks shall be model year 2010 or newer if diesel fueled. i) Information on ridesharing programs shall be made available to construction employees. j) During construction, lunch options shall be provided onsite. k) A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints per AQMD Standards. l) Off-site construction shall be limited to the hours between 6 a.m. to 8 p.m. on weekdays only. Construction during City holidays shall not be permitted.	
	4.3.6.2B	Prior to issuance of any grading permits, a traffic control plan shall be submitted to and approved by the City of Moreno Valley that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. Construction trucks shall be rerouted away from sensitive receptor areas. Trucks shall use State Route 60 using World Logistics Center Parkway (formerly	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		Theodore Street), Redlands Boulevard (north of Eucalyptus Avenue), and Gilman Springs Road. In addition to its traffic safety purpose, the traffic control plan can minimize traffic congestion and delays that increase idling emissions. A copy of the approved Traffic Control Plan shall be retained on site in the construction trailer.	
	4.3.6.2C	The following measures shall be applied during construction of the project to reduce volatile organic compounds (VOC): a) Non-VOC containing paints, sealants, adhesives, solvents, asphalt primer, and architectural coatings (where used), or pre-fabricated architectural panels shall be used in the construction of the project to the maximum extent practicable. If such products are not commercially available, products with a VOC content of 100 grams per liter or lower for both interior and exterior surfaces shall be used. b) Leftover paint shall be taken to a designated hazardous waste center. c) Paint containers shall be closed when not in use. d) Low VOC cleaning solvents shall be used to clean paint application equipment. e) Paint and solvent-laden rags shall be kept in sealed containers.	
	4.3.6.2D	No grading shall occur on days with an Air Quality Index forecast greater than 150 for particulates or ozone as forecasted for the project area (Source Receptor Area 24).	
Impact 4.3.6.3 Localized Construction and Operation Emissions			
Future development within the WLCSP will exceed local significance thresholds of the SCAMQD for trucks and other operational activities.	**4.3.6.3A**	Prior to issuance of occupancy permits for each warehouse building within the WLCSP, the developer shall demonstrate to the City that vehicles can access the building using paved roads and parking lots.	Significant and Unavoidable
	4.3.6.3B	The following shall be implemented as indicated: **Prior to Issuance of a Certificate of Occupancy** a) Signs shall be prominently displayed informing truck drivers about the California Air Resources Board diesel idling regulations and the prohibition of parking in residential areas. b) Signs shall be prominently displayed in all dock and delivery areas advising of the following: engines shall be turned off when not in use; trucks shall not idle for more than three consecutive minutes;	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	telephone numbers of the building facilities manager and the California Air Resources Board to report air quality violations. c) Signs shall be installed at each exit driveway providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow. Truck routes shall be clearly marked per the City Municipal Code. **On an Ongoing Basis** d) Tenants shall maintain records on fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles are maintained pursuant to manufacturer's specifications. The records shall be maintained on site and be made available for inspection by the City. e) Tenant's staff in charge of keeping vehicle records shall be trained/certified in diesel technologies, by attending California Air Resources Board approved courses (such as the free, one-day Course #512). Documentation of said training shall be maintained on-site and be available for inspection by the City. f) Tenants shall be encouraged to become a SmartWay Partner. g) Tenants shall be encouraged to utilize SmartWay 1.0 or greater carriers. h) Tenants' fleets shall be in compliance with all current air quality regulations for on-road trucks including but not limited to California Air Resources Board's Heavy-Duty Greenhouse Gas Regulation and Truck and Bus Regulation. i) Information shall be posted in a prominent location available to truck drivers regarding alternative fueling technologies and the availability of such fuels in the immediate area of the World Logistics Center. j) Tenants shall be encouraged to apply for incentive funding (such as the Voucher Incentive Program [VIP], Carl Moyer, etc.) to upgrade their fleet. k) All yard trucks (yard dogs/yard goats/yard jockeys/yard hostlers) shall be powered by electricity, natural gas, propane, or an equivalent non-diesel fuel. Any off-road engines in the yard trucks shall have emissions standards equal to Tier 4 Interim or greater. Any on-road engines in the yard trucks shall have emissions standards that meet	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025.	
		l) All diesel trucks entering logistics sites shall meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025 or be powered by natural gas, electricity, or other diesel alternative. Facility operators shall maintain a log of all trucks entering the facility to document that the truck usage meets these emission standards. This log shall be available for inspection by City staff at any time.	
		m) All standby emergency generators shall be fueled by natural gas, propane, or any non-diesel fuel.	
		n) Truck and vehicle idling shall be limited to three (3) minutes.	
	4.3.6.3C	Prior to the issuance of building permits for more than 25 million square feet of logistics warehousing within the Specific Plan area, a publically-accessible fueling station shall be operational within the Specific Plan area offering alternative fuels (natural gas, electricity, etc.) for purchase by the motoring public. Any fueling station shall be placed a minimum of 1000 feet from any off-site sensitive receptors or off-site zoned sensitive uses. This facility may be established in connection with the convenience store required in Mitigation Measure 4.3.6.3D.	
	4.3.6.3D	Prior to the issuance of building permits for more than 25 million square feet of logistics warehousing within the Specific Plan area a site shall be operational within the Specific Plan area offering food and convenience items for purchase by the motoring public. This facility may be established in connection with the fueling station required in Mitigation Measure 4.3.6.3C.	
	4.3.6.3E	Refrigerated warehouse space is prohibited unless it can be demonstrated that the environmental impacts resulting from the inclusion of refrigerated space and its associated facilities, including, but not limited to, refrigeration units in vehicles serving the logistics warehouse, do not exceed any environmental impact for the entire World Logistics Center identified in the Revised Sections of the FEIR. Such environmental analysis shall be provided with any warehouse plot plan proposing refrigerated space. Any such proposal shall include electrical hookups at dock doors to provide power for vehicles equipped with Transportation Refrigeration Units (TRUs).	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
Impact 4.3.6.4 Long-Term Operational Emissions			
Future development within the WLCSP will exceed daily air pollutant significance criteria established by the SCAMQD for trucks and other operational activities.	**4.3.6.4A**	The following measures shall be incorporated as conditions to any Plot Plan approval within the Specific Plan: a) All tenants shall be required to participate in Riverside County's Rideshare Program. b) Storage lockers shall be provided in each building for a minimum of three percent of the full-time equivalent employees based on a ratio of 0.50 employees per 1,000 square feet of building area. Lockers shall be located in proximity to required bicycle storage facilities. c) Class II bike lanes shall be incorporated into the design for all project streets. d) The project shall incorporate pedestrian pathways between on-site uses. e) Site design and building placement shall provide pedestrian connections between internal and external facilities. f) The project shall provide pedestrian connections to residential uses within 0.25 mile from the project site. g) A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building. In addition, parking facilities with 100 parking spaces or more shall be designed and constructed so that at least three percent of the total parking spaces are capable of supporting future electric vehicle supply equipment (EVSE) charging locations. Only sufficient sizing of conduit and service capacity to install Level 2 Electric Vehicle Supply Equipment (EVSE) or greater are required to be installed at the time of construction. h) Each building shall provide indoor and/or outdoor - bicycle storage space consistent with the City Municipal Code and the California Green Building Standards Code. Each building shall provide a minimum of two shower and changing facilities for employees. i) Each building shall provide preferred and designated parking for any combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles equivalent to the number identified in California Green Building Standards Code Section 5.106.5.2 or the Moreno Valley Municipal Code whichever requires the higher number of carpool/vanpool stalls.	Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	j) The following information shall be provided to tenants: onsite electric vehicle charging locations and instructions, bicycle parking, shower facilities, transit availability and the schedules, telecommunicating benefits, alternative work schedule benefits, and energy efficiency.	
Impact 4.3.6.5 Impacts to Sensitive Receptors		
The construction and operation of the project would result in the emissions of several toxic air contaminants, the most ubiquitous being diesel particulate matter (diesel PM). The projects estimated cancer risk for sensitive receptors onsite would exceed the maximum cancer risk thresholds.	**4.3.6.5A** Prior to the issuance of grading permits, the Applicant shall arrange for MERV 13 air filters to be installed at the residence located at 13241 World Logistics Center Parkway (formerly Theodore Street). Implementation of the previously identified Mitigation Measures 4.1.6.1A, 4.3.6.2A through 4.3.6.2D, and 4.3.6.3A through 4.3.6.3E will help reduce short- and long-term project emissions and health risks to sensitive receptors, but not to less than significant levels.	Significant and Unavoidable
Cumulative Air Quality Impacts		
The project will increase short-term local and long-term regional air pollutant emissions and chronic health risks.	Implementation of the previously identified Mitigation Measures 4.3.6.2A through 4.3.6.2D, 4.3.6.3A through 4.3.6.3E, and 4.3.6.4A and 4.3.6.5A will help reduce short- and long-term project emissions and health risks, but not to less than significant levels.	Significant and Unavoidable
4.4 Biological Resources		
LESS THAN SIGNIFICANT IMPACTS		
Adopted Policies and/or Ordinances		
There are no local policies or ordinances regarding the protection of biological resources.	No mitigation required	No Impact
The project would not conflict with an adopted HCP, NCCP or local. regional or state habitat conservation plan.	**4.4.5.2A** Each Plot Plan application shall include a focused plant survey of the proposed development site prepared by a qualified biologist to identify if any of the following sensitive plants (i.e., Coulter's goldfields, smooth tarplant, Plummer's mariposa lily, or thread-leaved brodiaea) are present. If any of the listed plants are found, they may be relocated to the 250-foot setback area outlined in the Specific Plan and discussed in Mitigation Measure 4.4.6.1A. Alternatively, at the applicant's discretion, an impact fee may be paid to the Western Riverside County Regional Conservation Authority (RCA) or other appropriate conservation	Less than significant with mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		organizations to offset for the loss of these species. This measure shall be implemented to the satisfaction of the Planning Official.	
	4.4.5.2B	Prior to the approval of any tentative maps for development including or adjacent to any Criteria Cells identified in the Western Riverside County Multiple Species Habitat Conservation Plan, the applicant shall prepare and process a Joint Project Review (JPR) with the Western Riverside County Regional Conservation Agency (RCA). All criteria cells shall be identified on all such tentative maps. This measure shall be implemented to the satisfaction of the City Planning Division and Western Riverside County Regional Conservation Authority ("RCA").	
	In addition, the **Mitigation Measures 4.4.6.1A and 4.4.6.1B** described below will also help reduce potential direct and indirect impacts to biological resources covered by the MSHCP. Potential impacts related to MSHCP consistency will be less than significant. With implementation of **Mitigation Measures 4.4.6.1A, 4.4.6.1B, 4.4.6.2B, 4.4.5.2A,** and **4.4.5.2B**, the less than significant impacts related to MSHCP consistency will be further reduced.		
Habitat Fragmentation/Wildlife Movement			
The project will not restrict the movement of wildlife to and from the Badlands and the SJWA/Mystic Lake area, and will protect Drainage 9 through the project area as a natural drainage channel.	No mitigation required		Less than Significant
Impact 4.4.6.1 Endangered and Threatened Species			
There are 17 plant and animal species designated as endangered or threatened by state and/or federal authorizes that have the potential to occur within the general vicinity of the WLC project area. Development will remove agricultural land which	**4.4.6.1A**	All Plot Plan applications within Planning Areas 10 and 12 (i.e. adjacent to the San Jacinto Wildlife Area as shown in Final EIR Volume 2 Figure 4.1.6B) shall provide a 250-foot setback from the southerly property line. Permitted uses within this setback area include landscaping, drainage and water quality facilities, fences and walls, utilities and utility structures, maintenance access drives, and similar related uses. No logistics	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
provides minimal habitat value for most species present.		buildings or truck access/parking/maneuvering facilities are permitted in this setback area. In addition, logistics buildings within Planning Areas 10 and 12 may not be located within 400 feet of the southerly property line. All development proposals in Planning Areas 10 and 12 shall include a minimum six-foot tall chain link fence or similar barrier to separate warehouse activity from the setback area. This fence/barrier shall have metal mesh installed below and above ground level to prevent animals from moving between the development area and the setback area. Within Planning Areas 10 and 12, all truck activity areas adjacent to the 250-foot buffer area along the southern property line shall be enclosed by minimum 11-foot tall solid walls to reduce noise and lighting impacts on the adjacent property. This measure shall be implemented to the satisfaction of the Planning Official. A preliminary landscape plan for the 250-foot setback area shall be submitted with all Plot Plan applications for lots adjacent to the California Department of Fish and Wildlife property. Precise landscape plans shall be submitted with any grading permit for said lots and must be approved prior to the issuance of any building permit on said lots. The landscape plan shall be prepared by a licensed landscape architect in consultation with a qualified biologist and shall be consistent with the design standards contained in the World Logistics Center Specific Plan. No plant species listed in Section 6.1.4 of the Western Riverside County Multiple Species Habitat Conservation Plan shall be installed within the setback area. Cottonwood trees shall be planted within the setback area consistent with the World Logistics Center Specific Plan. This measure shall be implemented to the satisfaction of the Land Development Division Manager.	
	4.4.6.1B	Each Plot Plan application in Planning Areas 10 and 12 shall provide runoff management and water quality facilities adequate to minimize downstream erosion, maintain water quality standards and retain pre-development flows in a manner meeting the approval of the City of Moreno Valley and RWQCB requirements. All drainage improvements shall be designed to minimize runoff and erosional impacts on adjacent property. This measure shall be implemented to the satisfaction of the Land Development Division Manager of Public Works.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
Impact 4.4.6.2 Jurisdictional Delineation, Riparian Habitat or Other Sensitive Natural Communities			
Drainage Features 7, 8, 9, 12, and 15 within the project area are considered riparian/riverine areas.	**4.4.6.2A**	Prior to the issuance of grading permits the applicant shall secure a jurisdictional determination from the United States Army Corps of Engineers (USACE) and confirm with the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) if drainage features mapped on the property to be developed are subject to jurisdictional authority. If the features are subject to regulatory protection, the applicant shall secure permit approvals with the appropriate agencies prior to initiation of construction. Compensatory riparian habitat mitigation shall be provided at a minimum ratio of 1:1 (replacement riparian habitat to impacted riparian habitat) to ensure no net loss of riparian habitat or aquatic resources. It should be noted that this is a minimum recommended ratio but the actual permitting ratio may be higher. These detention basins shall be oversized to accommodate the provision of areas of riparian habitat. Maintenance of the basins shall be limited to that necessary to ensure their drainage and water quality functions while encouraging habitat growth. Riparian habitat mitigation shall be provided concurrent to or prior to impacts. A Compensatory Mitigation Plan shall be prepared for all unavoidable impacts and shall be consistent with the United States Army Corps of Engineers (USACE)/United States Environmental Protection Agency's Compensatory Mitigation for Losses of Aquatic Resources; Final Rule and the United States Army Corps of Engineers Standard Operating Procedure for Determination of Mitigation Ratios. The applicant shall consult with United States Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board to establish the need for permits based on the results of a recent jurisdictional delineation and final design plans for each of the proposed the facilities. Consultation with the three agencies shall take place and appropriate permits obtained for project-level development. Compensation for losses associated with the altering of drainages on site shall be in agreement with the permit conditions and in coordination with compensation outlined below. Mitigation shall consist of onsite creation, offsite creation, or purchase of mitigation credits from an approved mitigation bank. As outlined in the WLC programmatic DBESP report, onsite riparian habitat shall be	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		created at a minimum 1:1 ratio due to the poor quality of onsite habitat. New habitat shall be created within the onsite detention/infiltration basins to the extent allowed by the resource agencies to reduce storm flows, improve water quality, and reduce sediment transport. Habitat creation shall include the installation of mule fat scrub or similar riparian scrub habitat to promote higher quality riparian habitat, but still maintain the basins for their primary role as detention facilities. The use of these areas as conservation areas would require consent from CDFW and the City of Moreno Valley (MM BIO-2b and MM DBESP 1 through 3).	
	4.4.6.2B	As required by the Resource Conservation Agency (RCA), a program-level Determination of a Biological Equivalent or Superior Preservation (DBESP) for impacts to Riverine/Riparian habitat has been prepared and shall be approved by the Resource Conservation Agency prior to project grading permit approval. The Determination of a Biological Equivalent or Superior Preservation includes a general discussion of mitigation options for impacts to riverine/riparian areas as well as general location and size of the mitigation area and includes a monitoring program. If impacts to riparian habitat within the WLC Specific Plan (WLCSP) cannot be avoided at the time of specific development, then a separate project-level Determination of Biologically Equivalent or Superior Preservation (DBESP) shall be prepared to identify project-specific impacts to riparian habitat and incorporate mitigation options identified in Mitigation Measure 4.4.6.2A. A project-level Determination of a Biological Equivalent or Superior Preservation for each specific development shall be prepared to document measures to reduce impacts to riparian/riverine habitats in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The project-level Determination of a Biological Equivalent or Superior Preservation shall include specific measures to reduce impacts to riparian areas and provide mitigation in the form of on-site preservation of riparian areas and/or a combination of compensation through purchase and placement of lands with riparian/riverine habitat into permanent conservation through a conservation easement and/or restoration or enhancement efforts at offsite or onsite locations. Mitigation required for compensation for impacts to riparian/ riverine areas shall require a minimum of 1:1 mitigation ratio of riparian/riverine mitigation land. As outlined in the WLC programmatic DBESP, erosion control improvements shall be installed within Drainage 9 to reduce sediment	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		transport, and additional riparian habitat shall be enhanced within this drainage following the installation of the erosion control improvements (MM DBESP 4 and 5).	
	4.4.6.2C	Prior to issuance of any grading permit for any offsite improvements that support development within the WLC site, the developer shall retain a qualified biologist to prepare a jurisdictional delineation (JD) for any drainage channels affected by construction of the offsite improvements. This jurisdictional delineation shall be submitted to the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) for review and concurrence. If the offsite improvements will not affect any identified jurisdictional areas, no United States Army Corps of Engineers permitting is required. However, permitting through the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (i.e., Streambed Alternation Agreement) may still be required for these improvements. The applicant shall consult with United States Army Corps of Engineers, California Department of Fish and Wildlife and Regional Water Quality Control Board to establish the need for permits based on the results of the 2013 jurisdictional delineation and final design plans for each of the proposed the facilities. Consultation with the three agencies shall take place and appropriate permits obtained. Compensation for losses associated with any altered offsite drainages shall be in agreement with the permit conditions with a minimum1:1 mitigation ratio. Any landscaping associated with these offsite improvements shall use only native species to help protect biological resources residing within or traveling through these drainages per Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Table 6.1.2. This measure shall be implemented to the satisfaction of the City Planning Division in consultation with the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and the California Department of Fish and Wildlife.	
Impact 4.4.6.3 Candidate, Non-listed Sensitive, or Special-Status Species			
The project area contains suitable habitat for sensitive species, including a variety of nesting birds, including burrowing owl, and Los Angeles pocket mouse.	**4.4.6.3A**	Pursuant to the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC), site preparation activities (removal of trees and vegetation) shall be avoided during the nesting season of potentially occurring native and migratory bird species (generally February 1 to August 31). If site preparation activities must occur during the nesting season, a pre-activity field survey shall be conducted by a qualified	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	biologist prior to issuance of grading permits for such development. The survey shall determine if active nests of species protected by the Migratory Bird Treaty Act or California Fish and Game Code are present in the construction zone. If active nests of these species are found, the developer shall establish an appropriate buffer zone with no grading or heavy equipment activity within of 500 feet from an active listed species or raptor nest, 300 feet from other sensitive or protected bird nests (non-listed), 250 feet from passerine birds, or 100 feet for sensitive or protected songbird nests. All construction activity within the vicinity of active nests must be conducted in the presence of a qualified biological monitor. Construction activity may encroach into the buffer area at the discretion of the biological monitor in consultation with CDFW. In the event no special status avian species are identified within the limits of disturbance, no further mitigation is required. In the event such species are identified within the limits of ground disturbance, mitigation measure 4.4.6.3B shall also apply. This measure shall be implemented to the satisfaction of the City Planning Division. **4.4.6.3B** If it is determined that project-related grading or construction will affect nesting migratory bird species, no grading or heavy equipment activity shall take place within the limits established in Mitigation Measure 4.4.6.3A until it has been determined by a qualified biologist that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow. This measure shall be implemented to the satisfaction of the City Planning Division. **4.4.6.3C** The loss of foraging habitat for golden eagle and white-tailed kite will be mitigated by payment of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) fee and the creation of a landscaped buffer area adjacent to the San Jacinto Wildlife Area property (SJWA). First, the payment of the Western Riverside County Multiple Species Habitat Conservation Plan fee shall be required on a project-by-project basis. Second, a 250-foot setback as described in Mitigation Measure 4.4.6.1A shall be established within the WLC site. This area will reduce impacts to raptor species foraging in the adjacent San Jacinto Wildlife Area open space areas. ***Burrowing Owl*** **4.4.6.3D**A pre-construction clearance survey for burrowing owl shall be conducted by a qualified biologist no more than thirty (30) days prior to any grading or ground disturbing activities within the WLC site.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	In the event no burrowing owls are observed within the limits of ground disturbance, no further mitigation is required. If construction is to be initiated during the breeding season (February 1 through August 31) and burrowing owl is determined to occupy any portion of the disturbance area during the 30-day pre-construction survey, construction activity shall maintain a 500foot buffer area around any active nest/burrow until it has been determined that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow. If this avoidance buffer cannot be maintained, consultation with the California Department of Fish and Wildlife (CDFW) shall take place and an appropriate avoidance distance established. No disturbance to active burrows shall occur without appropriate permitting through the Migratory Bird Treaty Act and/or California Department of Fish and Wildlife. If active burrowing owl burrows are detected outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the California Department of Fish and Wildlife. A relocation plan may be required by California Department of Fish and Wildlife if active and/or passive relocation is necessary. The relocation plan shall outline the basic process and provides options for avoidance. Construction activity may occur within 500 feet of the burrows at the discretion of the biological monitor in consultation with CDFW. A relocation plan may be required by California Department of Fish and Wildlife if active or passive relocation is necessary. Artificial burrows may be constructed within appropriate burrowing owl habitat within the proposed open space/conservation area (Planning Area 30), a 74.3-acre area in the southwest portion of the Specific Plan. This area abuts the Lake Perris State Recreation Area (LPSRA) which is already in conservation. If suitable habitat is not present in Planning Area 30, owls may be relocated to the SJWA, the 250-foot buffer area or other suitable on-site or off-site areas. Construction activity may occur within 500 feet of the burrows at the discretion of the biological monitor. ***Los Angeles Pocket Mouse*** **4.4.6.3E** Prior to the approval of any Plot Plans proposing the development of land including or adjacent to Drainage 9, a protocol survey for the Los Angeles Pocket Mouse (LAPM), including 100 feet upstream and downstream of the affected reach shall be prepared by a qualified biologist and	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	submitted to the City. If the affected drainage is not occupied, the area is considered not to be occupied and development can continue without further action. If the species is found within the specific survey area, no development shall occur until an appropriate mitigation fee is paid or appropriate amount of land set aside on the WLC site or off site to compensate for any loss of occupied Los Angeles Pocket Mouse habitat. Alternatively, individuals may be relocated to the 250-foot setback zone along the southern boundary of the property identified in Mitigation Measure 4.4.6.1A, or other appropriate areas as determined by the United States Fish and Wildlife Service. If necessary, this measure shall also be coordinated with Mitigation Measure 4.4.6.2B regarding preparation and processing of a Determination of a Biological Equivalent or Superior Preservation report. This measure shall be implemented to the satisfaction of the City Planning Division. ***Resource Management*** **4.4.6.3F** Prior to approval of any discretionary permits for development within Planning Areas 10 and 12, a Biological Resource Management Plan (BRMP) shall be prepared to prescribe how the 250-foot setback area outlined in Mitigation Measure 4.4.6.1A will be developed and maintained This plan will identify frequent and infrequent vegetation management requirements (i.e., removal of invasive plants) and the planting and maintaining trees to provide roosting and nesting opportunities for raptors and other birds. The Biological Resource Management Plan shall also describe how relocation of listed or sensitive species will occur from other locations as outlined in Mitigation Measures 4.4.5.2A, 4.4.6.3D, and 4.4.6.3E. The Biological Resource Management Plan shall be reviewed and approved by the Planning Official in consultation with the San Jacinto Wildlife Area Manager. The Biological Resource Management Plan shall cover all the land within the 250-foot setback zone within Planning Areas 10 and 12 Implementation of the plan shall be supervised by a qualified biologist, to the satisfaction of the City Planning Division. **4.4.6.3G** Mitigation Measure 4.4.6.1A specifies that a landscape plan shall be submitted with any development proposal for lots adjacent to the California Department of Fish and Wildlife (CDFW) San Jacinto Wildlife Area (SJWA) property prior to issuance of a precise grading permit. The landscape plan shall be prepared by a licensed landscape architect in consultation with a qualified biologist and shall be consistent with the design standards contained in the Specific Plan. No plant species listed	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		in Section 6.1.4 or Table 6.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) shall be installed within the setback area. In conjunction with development adjacent to the San Jacinto Wildlife Area (SJWA), cottonwood trees shall be planted within the 250-foot setback area, consistent with the World Logistics Center Specific Plan plant palette (per DBESP MM 8). During construction, the runoff leaving construction areas shall be directed to onsite detention basins and away from downstream drainage features located offsite. All projects within the WLCSP will be required to prepare a Storm Water Pollution Prevention Plan (as outlined in MM 4.9.6.2B). Regarding the 250-foot setback area, pedestrian and vehicular access to areas of riparian/riverine habitat will be prohibited except for controlled maintenance access. Finally, no grading shall be permitted within conserved riparian/riverine habitat areas except for grading necessary to established or enhance habitat areas (DBESP MM 6, 7, 9, and 10).	
	4.4.6.3H	As outlined in Mitigation Measure 4.4.6.1A, development adjacent to the 250-foot open space setback shall have a six-foot chain link fence or similar barrier to help separate human activity and the buffer area. Any chain link fencing installed on any properties adjacent to the 250-foot buffer area shall have metal mesh installed below and above ground level to prevent animals from accessing new development areas.	
	4.4.6.3I	The individual property owner and/or Property Owners Association (POA) as appropriate shall be responsible for maintaining the various onsite landscaped areas, open improved or natural drainage channels, and detention or flood control basins in a manner that provide for fuel management and vector control pursuant to standards maintained by the City Fire Marshall and County Department of Environmental Health-Vector Control Group. This measure requires the individual owner or Property Owners Association (POA) to manage vegetation in and around these areas or improvements so as to not represent a fire hazard as defined by the City Fire Department through the substantial buildup of combustible materials. This measure also requires the individual owner or Property Owners Association to manage vegetation and standing water in drainage channels and basins such that they do not encourage or allow vectors to occur (primarily rats and mosquitoes). Runoff shall not be allowed to stand in channels or basins for more than 72 hours without treatment or maintenance to prevent establishment of mosquitoes per published County vector control guidelines and “Best Management	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		Practices for Mosquito Control on California State Properties" which is available from the California West Nile Virus website at http://www.westnile.ca.gov/resources. This measure shall be implemented by the Property Owners Association in consultation with the City Fire Department and Riverside County Department of Environmental Health – Vector Control Group.	
	4.4.6.3J	A Fuel Management Plan shall be prepared on a project-by-project basis for those Planning Areas adjacent to the south and east boundary of the WLC site adjacent to Western Riverside County Multiple Species Habitat Conservation Plan Conservation Areas. The Fuel Management Plan shall be prepared by the project proponent and submitted for approval to the prior to plot plan approval for those projects on the southern and eastern Western Riverside County Multiple Species Habitat Conservation Plan boundary. Per the Western Riverside County Multiple Species Habitat Conservation Plan guidelines, the Fuel Management Plan shall include the following: • A plant palette of adequate plant species that may be planted within the Fuel Management Area, which will be approved by a biologist familiar with the plant requirements of the area. • A list of non-native invasive plants that are prohibited from installation. • Maintenance activities and a maintenance schedule. Fuel modification zones shall be mapped and include an impact assessment as required under California Environmental Quality Act guidelines for a project-level analysis. The plan shall demonstrate that the adjacent Western Riverside County Multiple Species Habitat Conservation Plan Areas are adequately protected from expected fire risks.	
	4.4.6.3K	Prior to approval of any plot plans for development adjacent to the SJWA, the applicant shall demonstrate that direct light rays have been contained within the development area, per requirements of the MSHCP Section 6.0 which states, "Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting." This measure shall be implemented to the satisfaction of the City Planning Division.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
Cumulative Biological Impacts			
With implementation of the stated project-specific mitigation and payment of required MSHCP fees, no significant cumulative effect on biological resources would result from development of the WLC project.	Previously referenced Mitigation Measures 4.4.6.1A through 4.4.6.1C, 4.4.6.2A through 4.4.6.2C, 4.4.6.3A through 4.4.6.3C, and 4.4.6.3A through 4.4.6.3K.		Less than Significant
4.5 Cultural Resources			
LESS THAN SIGNIFICANT IMPACTS			
Human Remains			
There is no evidence that the site has been utilized for human burials, and there is state law dealing with human remains that are found during grading or excavation.	No mitigation required.		Less than Significant
SIGNIFICANT IMPACTS			
Impact 4.5.6.1 Archaeological Resources			
Most of the site has been previously surveyed, and previously identified resources have been surveyed and retrieved according to required protocols. Nine on-site rural residential properties (designated "Light Logistics") have not been previously surveyed and would need to be surveyed prior to development. The City has conducted SB 18 Consultation with local Native American tribes and the Pechanga and Soboba tribes have expressed a desire to consult.	**4.5.6.1A**	Prior to the approval of any grading permit for any of the "Light Logistics" parcels, the parcels shall be evaluated for significance by a qualified archaeologist. A Phase 1 Cultural Resources Assessment shall be conducted by the project archaeologist and an appropriate tribal representative(s) on each of the "Light Logistics" parcel to determine if significant archaeological or historical resources are present. A Phase 2 significance evaluation shall be completed for any of these sites in order to determine if they contain significant archaeological or historical resources. Cultural resources include but are not limited to stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. All resources determined to be prehistoric or historic shall be documented using DPR523 forms for archival research/storage in the Eastern Information Center (EIC). If the particular resource is determined to be not significant, no further documentation is required. If prehistoric resources are determined to be significant, they shall be considered for relocation or archival documentation. If any resource is determined to be significant, a Phase 3 recovery study shall be conducted to recover remaining significant	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		cultural artifacts. If prehistoric archaeological/cultural resources are discovered during the Phase 1 survey and it is determined that they cannot be avoided through site design, they shall be subject to a Phase 2 testing program. The project archaeologist in consultation with appropriate tribal group(s) shall determine the significance of the resource(s) and determine the most appropriate disposition of the resource(s) in accordance with applicable laws, regulations and professional practices (per Cultural Report MM CR-1, MM CR-2, MM CR-7 Table 3, pg. 74).	
	4.5.6.1B	Prior to the issuance of any grading or ground-disturbing permit for construction of off-site improvements a qualified archaeologist shall be retained to prepare a Phase I cultural resource assessment (CRA) of the project site if an up to date Phase I cultural resource assessment is not available for the site at the time of development per Cultural Report MM CR-5, Table 3, pg. 74). Appropriate tribal representatives as identified by the City shall be invited by the Project Archeologist to participate in this assessment. If archaeological resources are discovered during construction activities, no further excavation or disturbance of the area where the resources were found shall occur until a qualified archaeologist evaluates the find. If the find is determined to be a unique archaeological resource, appropriate action shall be taken to (a) plan construction to avoid the archeological sites (the preferred alternative); (b) cap or cover archeological sites with a layer of soil before building on the affected project location; or (c) excavate the site to adequately recover the scientifically consequential information from and about the resource. At the discretion of the project archaeologist, work may continue on other parts of the project site while the unique archaeological resource mitigation takes place. This measure shall be implemented to the satisfaction of the Planning Official. If the project archaeologist, in consultation with the monitoring Tribe(s), determines that the find is a unique archaeological resource, the resource site shall be evaluated and recorded in accordance with requirements of the State Office of Historic Preservation (OHP). If the resource is determined to be significant, data shall be collected by the qualified archaeologist and the findings of the report shall be submitted to the City. If the find is determined to be not significant no mitigation is necessary.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		Should a future project-level analysis show that cultural resource site CA-RIV-3346 will be directly or partially impacted by project-level construction, an Addendum cultural resource report must be prepared and include an analysis of the alternatives associated with mitigation for impacts to this resource following CEQA Guidelines Section 15126.4(b)(3). This information must be included in any project-level CEQA compliance documentation. It should be noted that Phase 3 data recovery is an acceptable mitigation action under CEQA Guidelines Section 15126.4(b)(3)(C) (per Cultural Report MM CR-3, Table 3, pg. 74). Should it be determined through a future project-level EIR analysis that prehistoric cultural resource sites CA-RIV-2993 and/or CA-RIV-3347 shall be directly impacted by future construction, these sites must be Phase 2 tested for significance (per Cultural Report MM CR-4, Table 3, pg. 74).	
	4.5.6.1C	Prior to the issuance of any grading permits a qualified archaeologist shall be retained to monitor all grading and shall invite tribal groups to participate in the monitoring. Project-related archaeological monitoring shall include the following requirements per Cultural Report MM CR-6, MM CR-8, Table 3, pg. 74): 1. All earthmoving shall be monitored to a depth of ten (10) feet below grade by the Project Archaeologist or his/her designated representative. Once all areas of the development project that have been cut to 10 feet below existing grade have been inspected by the monitor, the Project Archaeologist may, at his or her discretion, terminate monitoring if and only if no buried cultural resources have been detected; 2. If buried cultural resources are detected, monitoring shall continue until 100 percent of virgin earth within the specific project area has been disturbed and inspected by the Project Archaeologist or his/her designated representative. 3. Grading shall cease in the area of a cultural artifact or potential cultural artifact as delineated by the Project Archaeologist or his/her designated representative. A buffer of at a minimum 25 feet around the cultural item shall be established to allow for assessment of the resource. Grading may continue in other areas of the site while the particular finds are investigated; and	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		4. If prehistoric cultural resources are uncovered during grading, they shall be Phase 2 tested by the Project Archaeologist, and evaluated for significance in accordance with §15064.5(f) of the CEQA Guidelines. Appropriate actions for significant resources as determined by the Phase 2 testing include but are not limited to avoidance or capping, incorporation of the site in green space, parks, or delineation into open space. If such measures are not feasible, Phase 3 data recovery of the significant resource will be required, and curation of recovered artifacts and/or reburial, shall be required. A report associated with Phase 2 testing or Phase 3 data recovery must be delivered to the City and, if necessary, the museum where any recovered artifacts have been curated. 5. No further grading shall occur in the area of the discovery until the City approves specific actions to protect identified resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the City where they would be afforded long-term preservation to allow future scientific study. 6. The developer shall make reasonable efforts to avoid, minimize, or mitigate significant adverse impacts on cultural resources The State Historic Preservation Office (SHPO) and local Native American tribes will be consulted and the Advisory Council on Historic Preservation will be notified within 48 hours of the find in compliance with 36 CFR 800.13(b)(3). This measure shall be implemented to the satisfaction of the Planning Official.	
	4.5.6.1D	Prior to the issuance of any grading permit the project archaeologist shall invite interested Tribal Group(s) representatives to monitor grading activities. Qualified representatives of the Tribal Group(s) shall be granted access to the project site to monitor grading as long as they provide 48-hour notice to the developer of their desire to monitor, so the developer can make appropriate safety arrangements on the site. This measure shall be implemented to the satisfaction of the Planning Official.	
	4.5.6.1E	It is possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources (archaeological or historical). In the event that buried cultural resources are discovered during grading and no Project Archaeologist or Historian is present, grading operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be retained to determine the most appropriate course of action regarding the resource. The Archeologist	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	shall make recommendations to the City on the actions that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the *CEQA Guidelines*. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under §15064.5 of the *CEQA Guidelines*, appropriate protective actions for significant resources such as avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds shall be implemented by the project archaeologist and the City. No further grading shall occur in the area of the discovery until the City and project archaeologist approve the measures to address these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the City where they would be afforded long-term preservation to allow future scientific study.	
Impact 4.5.6.2 Historic Resources		
Seven on-site rural residential properties (designated "Light Logistics") have not been previously surveyed for historical resources, and would need to be surveyed prior to development. Juan Bautista de Anza crossed the southern portion of the site while exploring California in 1774.	**4.5.6.2A** If any historic resources are found during implementation of Mitigation Measure 4.5.6.1A, the Project Archaeologist or Historian (as appropriate) shall offer any artifacts or resources to the Moreno Valley Historical Society (MVHS) or the Eastern Information Center/County Museum or the Western Science Center in Hemet as appropriate for archival storage. From the time any artifacts are turned over to the Moreno Valley Historical Society or other appropriate historical group, the developer shall have no further responsibility for their management or maintenance. In addition, the following measure is proposed to acknowledge the route of Juan Bautista de Anza through the project area as an important historical event: **4.5.6.2B** As part of construction of the trail segment connecting Redlands Boulevard to the California Department of Fish and Wildlife property, the developer shall contribute $5,000 to the City for the installation of a historical marker acknowledging the passing of Juan Bautista de Anza	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		through this area during his exploration of California. This measure shall be incorporated into trail plans for this segment which will be subject to review and approval by the City Park and Recreation Department in consultation with the Moreno Valley Historical Society.	
	4.5.6.2C	Streets C and E shall follow the historical alignment of Alessandro Boulevard and shall be named Alessandro Boulevard.	
Impact 4.5.6.3 Paleontological Resources			
The project area is considered moderately sensitive regarding paleontological resources, and fossiliferous materials have been found in the surrounding region in the past.	**4.5.6.3A**	Prior to the issuance of any grading permits, a City-approved Paleontologist shall be retained to conduct paleontological monitoring as needed for all grading related to development. Development monitoring shall include the following actions: 1. Monitoring must occur in areas where excavations are expected to exceed twenty (20) feet in depth, in areas where fossil-bearing formations are found during grading, and in all areas found to contain, or are suspected of containing, fossil-bearing formations. 2. To avoid construction delays, paleontological monitors shall be equipped to salvage fossils and remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates if they are unearthed. 3. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of specimens. 4. Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by the Project Paleontologist to have low potential to contain fossil resources. This measure shall be implemented to the satisfaction of the Planning Official. The Project Paleontologist and the Project Archaeologist described in Mitigation Measure 4.5.6.1C may be the same person if he/she meets the qualifications of both positions per Cultural Report MM PR-1, Table 4, pg. 76).	Less than Significant with Mitigation
	4.5.6.3B	Prior to the issuance of any permits for the construction of off-site improvements, a qualified paleontologist shall conduct an assessment for paleontological resources on each off-site improvement location. If any site is determined to have a potential for exposing paleontological resources, the project paleontologist shall monitor off-site	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	grading/excavation, subject to coordination with the City. Development monitoring shall include the following mitigation measures: 1. Monitoring must occur in areas where excavations are expected to reach fossil-bearing formations during grading. This monitoring must be conducted by the Project Paleontologist in all areas found to or suspected of containing fossil-bearing formations. 2. To avoid construction delays, the Project Paleontologist shall be equipped to salvage fossils and remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates as they are unearthed. 3. The Project Paleontologist shall be empowered to temporarily halt or divert equipment to allow removal of specimens. 4. Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by the Project Paleontologist to have low potential to contain fossil resources.	
Cumulative Cultural Impacts		
The project site and surrounding area, especially the uplands associated with Mt. Russell, have yielded cultural resources in the past. As this area develops, there is a potential for impacts to or loss of archaeological, historical, or paleontological resources.	Previously referenced Mitigation Measures 4.5.6.1A through 4.5.6.1E, 4.5.6.2A through 4.5.6.2C, and 4.5.6.3A and 4.4.6.3B.	Less than Significant
4.6 Geology and Soils		
LESS THAN SIGNIFICANT IMPACTS		
Landslides or Rockfalls		
A large older landslide has been mapped primarily off site on the north easterly flanks of Mount Russell, near the southwest portion of the property. The Specific Plan designates 74.3 acres in the southwest corner of the site as open space.	No development will occur in the potential landslide zone, so no mitigation is needed.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Soil Erosion or Loss of Topsoil		
On-site soils have a slight erosion hazard, and uncontrolled runoff could result in erosion or loss of topsoil.	The project would be required to adhere to the City's Grading Ordinance, obtain an NPDES Permit, prepare an SWPPP and a WQMP, construction and operational impacts associated with soil erosion hazards are considered to be less than significant, and no mitigation is required.	Less than Significant
Septic Tanks		
The project would not involve the installation of septic tanks or alternative wastewater disposal systems, no impacts would occur.	No mitigation is required.	No Impact
Seismic-Related Ground Failure		
The City's General Plan and project geotechnical report indicates the site has little or no potential for seismically-induced failure or liquefaction.	No mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
Impact 4.6.6.1 Fault Rupture		
The eastern portion of the site contains one or more splays of the San Jacinto Fault, and the Casa Loma Fault may be in in the general vicinity of the western portion of the site.	**4.6.6.1A** Prior to approval of any projects for development between Redlands Boulevard and Theodore Street, south of Dracaea Avenue (projected east from Redlands Boulevard), and the area south of Alessandro from the western boundary along the Mount Russell toe of slope easterly into the site 1,500 feet, the City shall determine if a detailed fault study of the Casa Loma Fault Zone area is required based on available evidence. If necessary, any additional geotechnical investigations shall be prepared by a qualified geologist and determine if structural setbacks are needed, and shall identify specific remedial earthwork and/or foundation recommendations. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific geotechnical investigations. In addition, the project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet the California Building Code requirements, and incorporate all applicable mitigations from the investigation into the structural design plans and shall ensure that all structural plans for the project meet current Building Code requirements. Additionally, a	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		registered geotechnical engineer shall review each site-specific geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure, and all other relevant construction permits. The City Building Division shall review and approve plans to confirm that the siting, design and construction of all structures and facilities are in accordance with the regulations established in the California Building Code (California Code of Regulations, Title 24), and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Structures intended for human occupancy shall not be located within any structural setback zone as determined by those studies. This measure shall be implemented to the satisfaction of the City Engineer in consultation with the Project Geologist.	
	4.6.6.1B	Prior to approval of any projects for development within or adjacent to the San Jacinto Alquist-Priolo Earthquake Fault Zone, the City shall review and approve a geotechnical fault study prepared by a qualified geologist to confirm the alignment and size of any required building setbacks related to the fault zone. If necessary, this study shall identify a "special foundation or grading remediation zone" for the areas supporting structures intended for human occupancy where coseismic deformation (fractures) is observed. This zone shall be determined after subsurface evaluation based on proposed building locations. Specific remedial earthwork and foundation recommendations shall be evaluated as necessary based on proposed building locations. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific geotechnical investigations. In addition, the project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet the California Building Code requirements, and incorporate all applicable mitigations from the investigation into the structural design plans and shall ensure that all structural plans for the project meet current Building Code requirements. Additionally, a registered geotechnical engineer shall review each site-specific geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure, and all other relevant construction permits. The City Building Division shall review and approve plans to confirm that the siting, design and construction of all structures and	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		facilities are in accordance with the regulations established in the California Building Code (California Code of Regulations, Title 24), and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. This study may involve trenching to adequately identify the location of the Claremont segment of the San Jacinto Fault Zone that crosses the eastern portion of the World Logistics Center Specific Plan property. This measure shall be implemented to the satisfaction of the City Engineer in consultation with the Project Geologist.	
	4.6.6.1C	Prior to the approval of grading permits, or permits for construction of off-site improvements, the City shall review and approve plans confirming that the project has been designed to withstand anticipated ground shaking and other geotechnical and soil constraints (e.g., settlement). The project proponent shall submit plans to the City as appropriate for review and approval prior to issuance of grading permits or issuance of permits for the construction of any offsite improvements. This measure shall be implemented to the satisfaction of the City Engineer.	
Impact 4.6.6.2 Ground Shaking			
Southern California is located in a seismically active area and will continue to be subject to ground shaking resulting from seismic activity on regional and local faults.	**4.6.6.2A**	Prior to issuance of building permits for any portion of the project site, a site-specific, design level geotechnical investigation for each parcel shall be submitted to the City, which would comply with all applicable state and local code requirements, and includes an analysis of the expected ground motions at the site from known active faults using accepted methodologies. The report shall determine structural design requirements as prescribed by the most current version of the California Building Code, including applicable City amendments, to ensure that structures can withstand ground accelerations expected from known active faults. The report shall also determine final design parameters for walls, foundations, foundation slabs, utilities, roadways, parking lots, sidewalks, and other surrounding related improvements. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific geotechnical investigations. In addition, the project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet the California Building Code requirements, and incorporate all applicable mitigations from the investigation into the structural design plans and shall ensure that all structural plans for the project meet current Building	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		Code requirements. Additionally, a registered geotechnical engineer shall review each site-specific geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure, and all other relevant construction permits. The City Building Division shall review and approve plans to confirm that the siting, design and construction of all structures and facilities are in accordance with the regulations established in the California Building Code (California Code of Regulations, Title 24), and/or professional engineering standards appropriate for the seismic zone in which such construction may occur.	
Impact 4.6.6.3 Unstable Soils			
On-site soils have a moderate to low shrink-swell potential, and there are some moderately expansive soils on site as well.	**4.6.6.3A**	Each Plot Plan application for development shall include a site-specific, design level geotechnical investigation for each parcel, in compliance with all applicable state and local code requirements, and including an analysis of the expected soil hazards at the site. The report shall determine: 1. Structural design requirements as prescribed by the most current version of the California Building Code, including applicable City amendments, to ensure that structures can withstand ground accelerations expected from known active faults. 2. The final design parameters for walls, foundations, foundation slabs, utilities, roadways, parking lots, sidewalks, and other surrounding related improvements. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site-specific geotechnical investigations. In addition, the project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet the California Building Code requirements, and incorporate all applicable mitigations from the investigation into the structural design plans and shall ensure that all structural plans for the project meet current Building Code requirements. These investigations shall identify any site-specific impacts from compressible and expansive soils based on the actual location of individual pads proposed in the future, so that differential movement can be further verified or evaluated in view of the actual foundation plan and imposed fill or structural loads. Additionally, a registered geotechnical engineer shall review each site-specific	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure, and all other relevant construction permits. The City Building Division shall review and approve plans to confirm that the siting, design and construction of all structures and facilities are in accordance with the regulations established in the California Building Code (California Code of Regulations, Title 24), and/or professional engineering standards appropriate for the seismic zone in which such construction may occur. Compliance with this measure will ensure that future buildings are designed to protect the structure and occupants from on-site soil limitations, consistent with State Building Code requirements. This measure shall be implemented to the satisfaction of the City Engineer.
	4.6.6.3B	Any cut slopes in excess of five (5) feet in vertical height shall be constructed as "replacement fill slopes" per the project geotechnical report, due to the variable nature of the onsite alluvial soils. This measure shall be implemented to the satisfaction of the City Land Development Division and the City Engineer in consultation with the Project Geologist.
	4.6.6.3C	During all grading activities, a geotechnical engineer shall monitor site preparation, removal of unsuitable soils, mapping of all earthwork excavations, approval of imported earth materials, fill placement, foundation installation, and other geotechnical operations. Laboratory testing of subsurface materials to confirm compacted dry density and moisture content, consolidation potential, corrosion potential, expansion potential, and resistance value (R-value) shall be performed prior to and during grading as appropriate. This measure shall be implemented to the satisfaction of the City Engineer in consultation with the Project Geologist.
Cumulative Geology and Soils Impacts			
It is reasonable to conclude that all development within this seismically active area will be required to adhere to applicable State regulations, CBC standards, and the design and siting standards required by local agencies.	Previously referenced Mitigation Measures 4.6.6.1A through 4.6.6.1C, 4.6.6.2A, and 4.6.6.3A through 4.6.6.3C.		Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
4.7 Greenhouse Gases and Global Climate Change		
LESS THAN SIGNIFICANT IMPACTS		
None	Not applicable	Not applicable
SIGNIFICANT IMPACTS		
Impact 4.7.6.1 Greenhouse Gas Emissions		
The project will emit substantial quantities of greenhouse gases during construction and operation, mainly related to truck emissions, that will exceed recommended SCAQMD thresholds for greenhouse gases. These emissions, while generated by this project, are nonetheless considered cumulative impacts (see below).	**4.7.6.1A** The World Logistic Center project shall implement the following requirements to reduce solid waste and greenhouse gas emissions from construction and operation of project development: a) Prior to January 1, 2020, divert a minimum of 50 percent of landfill waste generated by operation of the project. After January 1, 2020, development shall divert a minimum of 75 percent of landfill waste. In January of each calendar year after project approval the developer and/or Property Owners Association shall certify the percentage of landfill waste diverted on an annual basis. b) Prior to January 1, 2020, recycle and/or salvage at least 50 percent of non-hazardous construction and demolition debris. After January 1, 2020, recycle and/or salvage at least 75 percent of non-hazardous construction and demolition debris. In January of each calendar year after project approval the developer and/or Property Owners Association shall certify the percentage of landfill waste diverted on an annual basis. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or co-mingled. Calculations can be done by weight or volume, but must be consistent throughout. c) The applicant shall submit a Recyclables Collection and Loading Area Plan for construction related materials prior to issuance of a building permit with the Building Division and for operational aspects of the project prior to the issuance of the occupancy permit to the Public Works Department. The plan shall conform to the Riverside County Waste Management Department's Design Guidelines for Recyclable Collection and Loading Areas.	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	d) Prior to issuance of certificate of occupancy, the recyclables collection and loading area shall be constructed in compliance with the Recyclables Collection and Loading Area plan. e) Prior to issuance of certificate of occupancy, documentation shall be provided to the City confirming that recycling is available for each building. f) Within six months after occupancy of a building, the City shall confirm that all tenants have recycling procedures set in place to recycle all items that are recyclable, including but not limited to paper, cardboard, glass, plastics, and metals. g) The property owner shall advise all tenants of the availability of community recycling and composting services. h) Existing onsite street material shall be recycled for new project streets to the extent feasible. **4.7.6.1B** (Previously Included as Utilities Mitigation Measure 4.16.4.6.1A for building energy). Each application for a building permit shall include energy calculations to demonstrate compliance with California Energy Efficiency Standards (Title 24, Part 6). Plans shall show the following: • Energy-efficient roofing systems, such as "cool" roofs, that reduce roof temperatures significantly during the summer and therefore reduce the energy requirement for air conditioning. • Cool pavement materials such as lighter-colored pavement materials, porous materials, or permeable or porous pavement, for all roadways and walkways not within the public right-of-way, to minimize the absorption of solar heat and subsequent transfer of heat to its surrounding environment. • Energy-efficient appliances that achieve the 2016 California Appliance Energy Efficiency Standards (e.g. EnergyStar® Appliances) and use of sunlight-filtering window coatings or double-paned windows	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	4.7.6.1C (Previously Included as Utilities Mitigation Measure 4.16.4.6.1B building energy). Prior to the issuance of any building permits within the WLC site, each project developer shall submit energy calculations used to demonstrate compliance with the performance approach to the California Energy Efficiency Standards, for each new structure. Plans may include but are not necessarily limited to implementing the following as appropriate: • High-efficiency air-conditioning with electronic management system (computer) control. • Isolated High-efficiency air-conditioning zone control by floors/separable activity areas. • Use of Energy Star ® exit lighting or exit signage. **4.7.6.1D** (Previously Included as Utilities Mitigation Measure 4.16.4.6.1C building energy; <u>now modified</u>). Prior to the issuance of a building permit, new development shall demonstrate that each building has implemented the following: • Install solar panels with a capacity equal to the peak daily demand for the ancillary office uses in each warehouse building <u>or up to the limit allowed by MVU's restriction on distributed solar PV connecting to their grid, whichever is greater;</u> • Increase efficiency for buildings by implementing either 10 percent over the 2008 Title 24's energy saving requirements or the Title 24 requirements in place at the time the building permit is approved, whichever is more strict; and • Require the equivalent of "Leadership in Energy and Environmental Design Certified" for the buildings constructed at the World Logistics Center based on Leadership in Energy and Environmental Design Certified standards in effect at the time of project approval.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Impact 4.7.6.2 Greenhouse Gas Plan, Policy, Regulation Consistency		
The project could be potentially inconsistent with established Greenhouse Gas plans, policies, or regulations.	Implementation of previously referenced Mitigation Measures 4.3.6.2A, 4.3.6.3B, 4.3.6.4A, 4.3.6.3C, 4.3.6.3D, 4.7.6.1A through 4.7.6.1D, 4.16.1.6.1A, 4.16.1.6.1B, and 4.16.1.6.1C, will help reduce project-related GHG emissions	Less than Significant with Mitigation
Cumulative Greenhouse Gas Impacts		
The project will emit substantial quantities of greenhouse gases during project operation, mainly related to truck emissions, that will exceed recommended SCAQMD thresholds for greenhouse gases. These emissions are considered cumulative in terms of global climate change.	Project-specific energy conservation, air quality, and greenhouse gas Mitigation Measure 4.7.6.1A through 4.7.6.1D will help reduce project greenhouse gas emissions, the project will not make a significant cumulative contribution to greenhouse gas emissions.	Less than Significant with Mitigation
4.8 Hazards and Hazardous Materials		
LESS THAN SIGNIFICANT IMPACTS		
Within Two Miles of a Private Airport, Airport Land Use Plan, or Public Airport		
The nearest airport is 7 miles away so, the development of the WLC project area as proposed would not result in airport safety hazards for people working in the WLC project area.	No mitigation is required.	No Impact
Existing or Proposed School		
There are no existing planned schools on or within a quarter mile of the project site.	No mitigation is required.	Less than Significant
Routine Transport, Use, or Disposal of Hazardous Materials and Reasonable Foreseeable Upset and Accident Conditions		
The transport, use, handling, or disposal of hazardous materials is regulated by various local, state, and federal standards, ordinances, and regulations that would ensure that potential impacts associated with environmental and health hazards related to an accidental release of hazardous	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
materials are less than significant, and no mitigation is required. Compliance with established safety laws and regulations regarding natural gas plants is expected to reduce this potential impact to a less than significant level, and no mitigation is required. Local soils would be extensively disturbed during grading, and would employ relatively stringent dust control measures including regular watering, and revegetation as soon as possible after grading. Under these conditions, it is unlikely that *Coccidioides immitis* spores ("Valley Fever") would survive in the soil. This potential impact appears minimal and no mitigation is recommended.		
Located on a List of Hazardous Materials Sites		
The project site and surrounding areas are not on any list of the hazardous materials sites as defined by Government Code Section 65962.5. In addition, a number of Phase 1 Environmental Site Assessments (ESAs) prepared for various portions of the site indicate that the site does not contain pesticides or other hazardous materials.	No mitigation is required.	Less than Significant
Conflict with Emergency Response Plans		
Compliance with existing regulations for emergency access and evacuation would ensure that impacts related to this issue are less than significant, and no mitigation is required.	No mitigation is required.	Less than Significant
Wildlands Fire Risk		
The Badlands to the east, across Gilman Springs Road, is considered a Very High Fire Hazard Area. The project allows the construction of warehouse buildings which have a low fire potential, and the	The WLC Specific Plan identifies a new on-site fire station, and payment of DIF and increased property taxes will fund future fire services. No other mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
project will add a new roadway network to facilitate access for fire protection vehicles and services. Fire Station #58 is relatively close to the project site, but future development will generate a need for an additional fire station on the site. New structures will have to comply with current Fire and Building Code regulations.			
SIGNIFICANT IMPACTS			
On-site Conditions Involving Hazardous Materials			
A number of Phase 1 Environmental Site Assessments (ESAs) prepared for various portions of the site indicate that the site does not contain pesticides or other hazardous materials. However, the existing rural residences on site have not been surveyed as yet for hazardous materials.	**4.8.6.1A**	Prior to demolition of any existing structures on the project site, a qualified contractor shall be retained to determine if asbestos-containing materials (ACMs) and/or lead-based paint (LBP) are present. If asbestos-containing materials and/or lead-based paint are present, prior to commencement of demolition, these materials shall be removed and transported to an appropriate landfill by a licensed contractor. In addition, onsite soils shall be tested for contamination by agricultural chemicals. If present, these materials shall be removed and transported to an appropriate landfill by a licensed contractor. This measure shall be implemented to the satisfaction of the Building Division including written documentation of the disposal of any asbestos-containing materials, lead-based paint, or agricultural chemical residue in conformance with all applicable regulations.	Less than Significant with Mitigation
	4.8.6.1B	Prior to the issuance of any discretionary permits associated with the proposed fueling facility ("logistic support" site in the LD zone), a risk assessment or safety study that identifies the potential public health and safety risks from accidents at the facility (e.g., fire, tank rupture, boiling liquid, or expanding vapor explosion) shall be submitted to the City for review and approval This study shall be prepared to industry standards and demonstrate that the facility will not create any significant public health or safety impacts or risks, to the satisfaction of the City Building and Safety Division and the Fire Prevention Bureau.	
	4.8.6.1C	Prior to grading for any discretionary permits for development in Planning Areas 9-12 adjacent to the natural gas compressor plant, the applicant shall prepare a risk assessment report analyzing safety conditions relative to the existing compressor plant and planned development. The report must be based on appropriate industry standards and identify the	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	potential hazards from the compressor plant (e.g., fire, explosion) and determine that the distance from the plant to the closest planned buildings in Planning Areas 9-12 is sufficient to protect the safety of workers from accidents that could occur (see Final EIR Volume 2 Figure 4.1.6B) at the compressor plant. This measure shall be implemented to the satisfaction of the City Building and Safety Division and the Fire Prevention Bureau. **4.8.6.1D** Prior to the issuance of any grading permit, the developer shall inform the City of any existing solid waste materials within the development area. In conjunction with grading activities, all solid waste matter within the development area shall be removed by a licensed contractor and disposed of in an approved landfill. A record of the removal and disposal of any waste materials, in compliance with applicable laws and regulations, shall be submitted to the City prior to the issuance of any building permits.	
Cumulative Hazards and Hazmat Impacts		
The risk to each future project is based on the location and interface between urbanized area and wildland areas. Potential risks associated with development in this area can be effectively reduced through conformance with Fire and Building Code regulations.	The WLC Specific Plan identifies a new on-site fire station, and increased property taxes will fund future police and fire services. Project specific mitigation measures 4.8.6.1A, 4.8.6.1B, 4.8.6.1C, and 4.8.6.1D are required and would ensure no significant cumulative impacts would result.	Less than Significant
4.9 Hydrology and Water Quality		
LESS THAN SIGNIFICANT IMPACTS		
Seismic Flooding-Related Impacts		
The WLC project area is not identified as being located within the City's mapped inundation area.	No mitigation required	Less than Significant
Seismic-Related Impacts		
The southwest corner of the site has slopes associated with Mt. Russell, but this area is designated as open space and the rest of the WLC	No mitigation is required	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
area gently sloping and landslides or mudslides would not occur here.			
Groundwater			
The proposed WLC project would not interfere with groundwater recharge as the project site is not identified as a groundwater recharge area and it will utilize water supplies from EMWD.	No mitigation is required		Less than Significant
100-Year Flooding-Related Impacts			
The project site does not lie within a 100-year floodplain and does not include housing, so impacts related to this issue are less than significant.	No mitigation is required		Less than Significant
SIGNIFICANT IMPACTS			
Impact 4.9.6.1 Drainage Pattern and Capacity-Related Impacts			
The project will modify local drainage patterns, increase impervious surfaces (roofs, hardscape, etc.), and add landscaped areas with irrigation.	**4.9.6.1A**	Prior to issuance of any building permit within the Specific Plan area, the developer shall construct storm drain pipes and conveyances, as well as, combined detention and infiltration basin(s), bioretention area(s), and spreading area(s) within each proposed watershed, as outlined in the project hydrology plan, to mitigate the impacts of increased peak flow rate, velocity, flow volume and reduce the time of concentration by storing and infiltrating increased runoff for a limited period of time and release the outflow at a rate that does not exceed the pre-development peak flows and velocities for the 2, 5, 10, 25, and 100-year storms and volumes as assessed in the water balance model for historical conditions. For the purpose of this mitigation measure, the term "construct" shall mean to substantially complete construction so as to function for its intended purpose during construction with complete construction prior to occupancy. Field investigations will be conducted to determine the infiltration rate of soils underlying the proposed locations of bioretention areas and detention basins. The infiltration rate of the underlying soils will be used to properly size the bioretention areas and detention basins/infiltration basins to ensure that adequate volumes of runoff, in cumulative total for all bioretention areas and detention basins, are captured and infiltrated. The water balance model will be updated	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		and rerun for the site-specific conditions encountered to confirm the water balance. This measure shall be implemented to the satisfaction of the City Engineer. Energy dissipaters shall be used as the spillways of basins to reduce the runoff velocity and dissipate the flow energy. Drainage weir structures shall be constructed at the downstream end of the watersheds flowing to the San Jacinto Wildlife Area to control the runoff and spread the flow such that the flows exiting the project boundary will return to the sheet flow pattern similar to the existing condition. Detention basins and spreading areas shall be designed to account for the amount of the sediment transported through the project boundary so that the existing sediment carrying capacity is maintained.	
	4.9.6.1B	The bioretention areas and detention/infiltration basins shall be designed to assure infiltrations rates. The monitoring plan will follow the guidelines presented by the California Storm Water Quality Association (CASQA) in the California Storm Water Best Management Program (BMP) Handbook, Municipal, January 2003 Section 4, Treatment Control Best Management Programs Fact Sheets TC-11 Infiltration Basin and TC-30 Vegetated Swale). For the Bioretention areas, as needed maintenance activities shall be conducted to remove accumulated sediment that may obstruct flow through the swale. Bioretention areas shall be monitored at the beginning and end of each wet season to assess any degradation in infiltration rates. The maintenance activities should occur when sediment on channels and culverts builds up to more than 3 inches (CASQA 2003). The swales will need to be cultivated or rototilled if drawdown takes more than 72 hours. For the Detention/infiltration Basins, a 3-5 year maintenance program shall be implemented mainly to keep infiltration rates close to original values since sediment accumulation could reduce original infiltration rate by 25-50%. Infiltration rates in detention basins will be monitored at the beginning and end of each wet season to assess any degradation in infiltration rates. If cumulative infiltration rates of all detention basins drops below the minimum required rates, then the detention basins will be reconditioned to improve infiltration capacity by scraping the bottom of the detention basin, seed or sod to restore groundcover, aerate bottom and dethatch basin bottom (CASQA 2003).	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
Impact 4.9.6.2 Construction-Related Water Quality			
The construction and grading phases of the WLC Specific Plan area would temporarily disturb surface soils and removal of vegetative cover, which could potentially result in erosion and sedimentation within the WLCSP area.	**4.9.6.2A**	Prior to issuance of any grading permit for development in the World Logistics Center Specific Plan, the project developer shall file a Notice of Intent (NOI) with the Santa Ana Regional Water Quality Control Board to be covered under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit for discharge of storm water associated with construction activities. The project developer shall submit to the City the Waste Discharge Identification Number issued by the State Water Quality Control Board (SWQCB) as proof that the project's Notice of Intent is to be covered by the General Construction Permit has been filed with the State Water Quality Control Board. This measure shall be implemented to the satisfaction of the City Engineer.	Less than Significant with Mitigation
	4.9.6.2B	Prior to issuance of any grading permit for development in the World Logistics Center Specific Plan, the project developer shall submit to the State Water Quality Control Board (SWQCB) a project-specific Storm Water Pollution Prevention Plan (SWPPP). The Storm Water Pollution Prevention Plan shall include a surface water control plan and erosion control plan citing specific measures to control on-site and off-site erosion during the entire grading and construction period. In addition, the Storm Water Pollution Prevention Plan shall emphasize structural and nonstructural best management practices (BMPs) to control sediment and non-visible discharges from the site. Best Management Practices to be implemented may include (but shall not be limited to) the following: • Sediment discharges from the site may be controlled by the following: sandbags, silt fences, straw wattles and temporary debris basins (if deemed necessary), and other discharge control devices. The construction and condition of the Best Management Practices are to be periodically inspected by the Regional Water Quality Control Board during construction, and repairs would be made as required. • Materials that have the potential to contribute non-visible pollutants to storm water must not be placed in drainage ways and must be placed in temporary storage containment areas. • All loose soil, silt, clay, sand, debris, and other earthen material shall be controlled to eliminate discharge from the site. Temporary soil stabilization measures to be considered include: covering disturbed areas with mulch, temporary seeding, soil stabilizing binders, fiber	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		rolls or blankets, temporary vegetation, and permanent seeding. Stockpiles shall be surrounded by silt fences and covered with plastic tarps. • The Storm Water Pollution Prevention Plan shall include inspection forms for routine monitoring of the site during the construction phase. • Additional required Best Management Practices and erosion control measures shall be documented in the Storm Water Pollution Prevention Plan. • The Storm Water Pollution Prevention Plan would be kept on site for the duration of project construction and shall be available to the local Regional Water Quality Control Board for inspection at any time. The developer and/or construction contractor for each development area shall be responsible for performing and documenting the application of Best Management Practices identified in the project-specific Storm Water Pollution Prevention Plan. Regular inspections shall be performed on sediment control measures called for in the Storm Water Pollution Prevention Plan. Monthly reports shall be maintained and available for City inspection. An inspection log shall be maintained for the project and shall be available at the site for review by the City of Moreno Valley and the Regional Water Quality Control Board.	
Impact 4.9.6.3 Operational-Related Water Quality			
During the operational phase of the WLC the major source of pollution in storm water runoff would be contaminants such as, a variety of pollutants such as sediment, petroleum products, commonly utilized construction materials, landscaping chemicals, and (to a lesser extent) trace metals such as zinc, copper, lead, cadmium, and iron that have accumulated on the land surface over which runoff passes. These contaminants may lead to the degradation of storm water in downstream channels and require mitigation to reduce impacts to less than significant.	**4.9.6.3A**	Prior to discretionary permit approval for individual plot plans, a site-specific Water Quality Management Plan (WQMP) shall be submitted to the City Land Development Division for review and approval. The Water Quality Management Plan shall specifically identify site design, source control, and treatment control Best Management Practices that shall be used on site to control pollutant runoff and to reduce impacts to water quality to the maximum extent practicable. The Water Quality Management Plan shall be consistent with the Water Quality Management Plan approved for the overall World Logistics Center Specific Plan project. At a minimum, the site developer shall implement the following site design, source control, and treatment control Best Management Practices as appropriate: **Site Design Best Management Practices** (a) Minimize urban runoff.	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	(b) Maximize the permeable area. (c) Incorporate landscaped buffer areas between sidewalks and streets. (d) Maximize canopy interception and water conservation by planting native or drought-tolerant trees and large shrubs. (e) Use natural drainage systems. (f) Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration. (g) Construct on-site ponding areas or retention facilities to increase opportunities for infiltration consistent with vector control objectives. (h) Minimize impervious footprint. (i) Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised. (j) Reduce widths of street where off-street parking is available. (k) Minimize the use of impervious surfaces such as decorative concrete, in the landscape design. (l) Conserve natural areas. (m) Minimize Directly Connected Impervious Areas (DCIAs). (n) Runoff from impervious areas will sheet flow or be directed to treatment control Best Management Practices. (o) Streets, sidewalks, and parking lots will sheet flow to landscaping/ bioretention areas that are planted with native or drought tolerant trees and large shrubs. **Source Control Best Management Practices** Source control Best Management Practices are implemented to eliminate the presence of pollutants through prevention. Such measures can be both non-structural and structural. Non-structural source control Best Management Practices include: (a) Education for property owners, operator, tenants, occupants, or employees; (b) Activity restrictions; (c) Irrigation system and landscape maintenance;	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	(d) Common area litter control; (e) Street sweeping private streets and parking lots; and (f) Drainage facility inspection and maintenance. Structural source control Best Management Practices include: (g) MS4 stenciling and signage; (h) Landscape and irrigation system design; (i) Protect slopes and channels; and (j) Properly design fueling areas, trash storage areas, loading docks, and outdoor material storage areas. **Treatment Control Best Management Practices** Treatment control Best Management Practices supplement the pollution prevention and source control measures by treating the water to remove pollutants before it is released from the project site. The treatment control Best Management Practice strategy for the project is to select Low Impact Development (LID) Best Management Practices that promote infiltration and evapotranspiration, including the construction of infiltration basins, bioretention facilities, and extended detention basins. Where infiltration Best Management Practices are not appropriate, bioretention and/or biotreatment Best Management Practices (including extended detention basins, bioswales, and constructed wetlands) that provide opportunity for evapotranspiration and incidental infiltration may be utilized. Harvest and Reuse Best Management Practice will be used to store runoff for later non-potable uses. Site-specific Water Quality Management Plans have not been prepared at this time as no site-specific development project has been submitted to the City for approval. When specific projects within the project are developed, Best Management Practices will be implemented consistent with the goals contained in the Master Water Quality Management Plan. All development within the project will be required to incorporate on-site water quality features to meet or exceed the approved Master Water Quality Management Plan's water quality requirements identified previously. **4.9.6.3B** The Property Owners Association (POA) and all property owners shall be responsible to maintain all onsite water quality basins according to requirements in the guidance Water Quality Management Plan and/or subsequent site-specific Water Quality Management Plans, and	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		established guidelines of the Regional Water Quality Control Board. Failure to properly maintain such basins shall be grounds for suspension or revocation of discretionary operating permits, and/or referral to the Regional Water Quality Control Board for review and possible action. This measure shall be implemented to the satisfaction of the City Land Development Division, in consultation with the City Engineer, and Regional Water Quality Control Board.	
	4.9.6.3C	Prior to issuance of future discretionary permits for any development along the southern boundary of the World Logistics Center Specific Plan (WLCSP), the project developer of such sites, in cooperation with the Property Owners Association (POA), shall establish and annually fund a Water Quality Mitigation Monitoring Plan (WQMMP) to confirm that project runoff will not have deleterious effects on the adjacent San Jacinto Wildlife Area (SJWA). This program shall include at least quarterly sampling along the southern boundary of the site (i.e., at the identified outlet structures of the project detention basins) during wet season flows and/or when water is present, as well as sampling of any dry-season flows that are observed entering the San Jacinto Wildlife Area property from the project property, including Drainage 9, which is planned to convey only clean off-site flows from north of the World Logistics Center Specific Plan site across Gilman Springs Road. The program shall also include at least twice yearly sampling after completion of construction, and a pre-construction survey must be completed to determine general water quality baseline conditions prior to and during development of the southern portion of the World Logistics Center Specific Plan. This sampling shall be consistent with and/or comply with the requirements of applicable Storm Water Pollution Prevention Plans (SWPPPs) for the development site. The project developer of sites along the southern border of the World Logistics Center Specific Plan shall be responsible for preventing or eliminating any toxic pollutant (not including sediment) found to exceed applicable established public health standards. In addition, the discharge from the project shall not cause or contribute to an exceedance of Receiving Water Quality Objectives for the potential pollutants associated with the project as identified in Table 4.9.J. Once development is complete, the developer shall retain qualified personnel to conduct regular (i.e., at least quarterly) water sampling/testing of any basins and their outfalls to ensure the San Jacinto Wildlife Area will not be affected by water pollution from the project site. This measure shall	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	be implemented to the satisfaction of the City Land Development Division Manager based on consultation with the project developer, Eastern Municipal Water District, the Regional Water Quality Control Board-Santa Ana Region, and the Mystic Lake Manager.	
Cumulative Hydrology and Water Quality		
The drainage system for the proposed WLC project would maintain post-development runoff at pre-development levels for off-site downstream properties. Therefore, the proposed WLC project will not make a significant contribution to any cumulatively considerable impacts related to drainage or water quality.	Previously referenced Mitigation Measures 4.9.6.1A, 4.9.6.1B, and 4.9.6.3A through 4.9.6.3C. No additional mitigation is required.	Less than Significant
4.10 Land Use and Planning		
LESS THAN SIGNIFICANT IMPACTS		
Conflict with Applicable Land Use Plans, Policies, or Regulations		
The land uses per se of the project are not consistent with SCAG growth projections and some Compass Plan policies because they are not residential in nature. However, the project will substantially improve the City's job/housing balance which is consistent with these regional plans. The WLC project is consistent with the City General Plan upon approval of the requested General Plan Amendment. The project is consistent with the City's Housing Element. Therefore, the project is consistent with both regional and local land use plans, policies, and regulations.	No mitigation is required.	Less than Significant
Conflict with any Applicable Habitat or Natural Community Conservation Plan		
The project will be required to comply with the requirements of the County's MSHCP and pay its development impact fee.	Previously referenced Mitigation Measures 4.4.6.1A through 4.4.6.1C, 4.4.6.2A and 4.4.6.2B, 4.4.6.3A and 4.4.6.3B, and 4.4.6.4A through 4.4.6.4F related to Biological Resources will be implemented, and no additional mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Cumulative Land Use and Planning Impacts		
The WLC project would not have significant project-related impacts related to dividing an established community, conflicting with applicable land use plans, policies, or regulations, or conflicting with an approved habitat conservation plan. While the WLC project would represent a shift in land use policy, this policy shift does not represent a significant CEQA impact.	No mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
Physically Divide an Established Community		
The WLC is located in the eastern end of the City, so its development would not physically divide an established community. However, development could adversely affect seven existing rural residences onsite, and the land plan cannot accommodate residences within logistics warehousing areas.	No feasible mitigation is available.	Significant and Unavoidable
4.11 Mineral Resources		
LESS THAN SIGNIFICANT IMPACTS		
Loss of Statewide, Regional, or Locally Important Mineral Resources		
The project site and surrounding area do not contain any identified regional or local mineral resources, nor are there any ongoing mineral resource extraction activities in the project area.	No mitigation is required.	No impact
Cumulative Mineral Resources		
The WLC project site does not contain significant forest resources, so it will not make a significant contribution to cumulatively considerable impacts relative to any forest resources.	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
SIGNIFICANT IMPACTS		
None	Not applicable	Less than Significant
4.12 Noise		
LESS THAN SIGNIFICANT IMPACTS		
Groundborne Vibration		
Project-related earthwork will create groundborne vibration, but the project noise study determined it would not exceed significance criteria for adjacent residential uses.	No mitigation is required.	Less than Significant
Airport Noise		
There are no public airports or private airstrips within two miles of the project site, so there will be no significant airport-related noise.	No mitigation is required.	No Impact
SIGNIFICANT IMPACTS		
Impact 4.12.6.1 Short-Term Construction Noise		
Project construction will create significant noise levels for on-site uses and off site away from the project site due to construction vehicle travel.	**4.12.6.1A** Prior to issuance of any discretionary project approvals, a Noise Reduction Compliance Plan (NRCP) shall be submitted to and approved by the City. The NRCP shall be prepared by a qualified acoustical consultant describing how noise reduction measures shall be implemented to reduce the noise exposure on sensitive receptors adjacent to onsite and offsite construction areas. The noise reduction measures shall be implemented so that construction activities do not exceed the City's daytime and nighttime average hourly noise standard of 60 dBA L_{eq} and 55 dBA L_{eq}, respectively. The construction noise reduction measures shall include, but not be limited to, the following measures:	Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	• All construction equipment, fixed or mobile, shall be equipped with operating and maintained mufflers consistent with manufacturers' standards. • Construction vehicles shall be prohibited from using Redlands Boulevard south of Eucalyptus Avenue to access on-site construction for all phases of development of the project. • No construction activity shall occur within 800 feet of residences between 8 p.m. and 7 a.m. on weekdays and weekends. • A 12-foot tall temporary construction sound barrier blocking the line-of-sight of construction activity to any residential receptor located within 800 feet of active construction areas shall be installed prior to commencement of any construction activity. The temporary sound barrier shall be constructed of plywood with a total thickness of 1.5 inches, or a sound blanket wall may be used. If sound blankets are used, they must have a Sound Transmission Class (STC) rating of 27 or greater. • Distribute to the potentially affected residences and other sensitive receptors within 500 feet of project construction boundary a "hotline" telephone number, which shall be attended during active construction working hours, for use by the public to register complaints. The distribution shall identify a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints and institute feasible actions warranted to correct the problem. All complaints shall be logged noting date, time, complainant's name, nature of complaint, and any corrective action taken. The distribution shall also notify residents adjacent to the project site of the construction schedule. Records of any complaints and corrective action	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		shall be stored at the site and available to the City upon request.	
Impact 4.12.6.2 Long-Term Traffic Noise			
Project operations will create significant long-term noise impacts on site and along a number of off-site roadways. Not all off-site impacts can be mitigated to less than significant levels by installing sound-attenuation improvements.	**4.12.6.2A**	When processing future individual buildings under the World Logistics Center Specific Plan, as part of the City's approval process, the City shall require the Applicant to take the following three actions for each building prior to approval of discretionary permits for individual plot plans for the requested development: Action 1: Perform a building-specific noise study to ensure that the assumptions set forth in the Revised Sections of the FEIR remain valid. These procedures used to conduct these noise analyses shall be consistent with the noise analysis conducted in the Revised Sections of the FEIR and shall be used to impose building-specific mitigation on the individually-proposed buildings. Action 2: If the building-specific analyses identify that the proposed development triggers the need for mitigation from the proposed building, including all preceding developments in the World Logistics Center site, the Applicant shall implement the appropriate level of mitigation, identified in the Revised Sections of the FEIR to reduce the identified impacts to comply with the Moreno Valley Municipal Code, which sets maximum sound levels reaching residential uses at 60 dBA during the daytime hours (8:00 a.m. – 10:00 p.m.) and 55 dBA during nighttime hours (10:01 p.m. – 7:59 a.m.). Prior to implementing the mitigation, the Applicant shall send letters by registered mail to all property owners and non-owner occupants of properties that would benefit from the proposed mitigation asking them to provide a position either in favor of or in opposition to the proposed noise abatement mitigation within 45 days. Each property shall be entitled to one vote on behalf of owners and one vote per dwelling on behalf of non-owner occupants. If more than 50% of the votes from responding benefited receptors oppose the abatement, the abatement will not be considered reasonable. Additionally, for noise abatement to be located on private property, 100% of owners of property upon which the abatement is to be placed must support the proposed abatement. In the case of proposed noise	Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		abatement on private property, no response from a property owner, after three attempts by registered mail, is considered a *no* vote. At the completion of the vote at the end of the 45-day period, the Applicant shall provide the tentative results of the vote to all property owners by registered mail. During the next 15 calendar days following the date of the mailing, property owners may change their vote. Following the 15-day period, the results of the vote will be finalized and made public. Action 3: Upon consent from benefited receptors and property owners, the Applicant shall post a bond for the cost of the construction of the necessary mitigation as estimated by the City Engineer to ensure completion of the mitigation. The certificate of occupancy permits shall be issued upon posting of the bond or demonstration that 50% of the votes from responding benefited receptors oppose the abatement or, if the abatement is located on private property, any property owners oppose the abatement.	
	4.12.6.2B	Prior to issuance/approval of any building permits, the centerline of Cactus Avenue Extension will be located no closer than 49 feet to the residential property lines along Merwin Street. An alternative is to locate the roadway closer to the residences and provide a soundwall along Cactus Avenue Extension. The soundwall location and height should be determined by a Registered Engineer, and the soundwall shall be designed to reduce noise levels to less than 65 CNEL at the residences. The Engineer shall provide calculations and supporting information in a report that will be required to be submitted to and approved by the City prior to issuing permits to construct the road.	
	4.12.6.2C	Prior to the approval of any discretionary permits, cumulative impact areas shown in the WLC EIR Noise Study shall be included in the soundwall mitigation program outlined in Mitigation Measures 4.12.6.2A and 4.12.6.2D.	
	4.12.6.2D	Prior to issuance of a building permit, the applicant shall demonstrate that the development maintains a buffer with soundwall for noise attenuation at residential/warehousing interface (i.e., western and southwestern boundaries of the project site). To keep the noise levels at nearby residential areas less than typical ambient conditions, the warehousing property line shall be located a minimum of 250 feet from	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		the residential zone boundary, and a 12-foot noise barrier shall be located along the perimeter of the property that faces any residential areas. The 12-foot noise barrier may be a soundwall, berm, or combination of the two. The height shall be measured relative to the pad of the warehouse. This requirement shall be implemented anytime residential areas are within 600 feet of the warehousing property line to insure that a noise level of 45 dBA (Leq) will not be exceeded at the residential zone. This requirement is consistent with Item 10 of Municipal Code Section 9.16.160 Business park/industrial that states, "All manufacturing and industrial uses adjacent to residential land uses shall include a setback zone and/or noise attenuation wall to reduce outside noise levels"	
Impact 4.12.6.3 Long-Term Operational Noise			
Potential long-term stationary noise impacts would primarily be associated with operations at logistics facilities within the WLCSP area. With implementation of a minimum 250-foot setback from residential uses, potential long-term operational noise impacts would be less than significant.	The project noise assessment determined that operational noise impacts from warehouse activities would not exceed City standards at nearby residential areas with implementation of the 250-foot setback requirement.		Less than Significant with Mitigation
Impact 4.12.6.4 Long-Term Utility Noise			
Noise generated by SCGC blow-down events has the potential to cause permanent hearing loss in persons in the developed area of the project. This is a significant impact and mitigation is required.	**4.12.6.4A**	Prior to the issuance of building permits for projects within 1,300 feet of the Southern California Gas Company (SCGC) and San Diego Gas and Electric (SDG&E) blow-down facilities, documentation shall be submitted to the City confirming that sound attenuation devices and/or improvements for the blow-down facilities providing at least a 40 dB reduction in noise levels during blow-down events are available and will be installed for all planned blow-down events. It shall be the responsibility of the developer to fund all sound attenuation improvements to the blow-down facilities required by this measure. It shall also be the responsibility of the developer to coordinate with San Diego Gas and Electric and/or Southern California Gas Company regarding the installation of any sound attenuation devices or improvements on the blow-down facilities at either the San Diego Gas and Electric compressor station or the Southern California Gas Company pipelines. This measure shall be implemented to the satisfaction of the City Land Management Division (per Noise Study MM N-11, pg.65).	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Impact 4.12.6.5 Cumulative Noise Impacts		
Traffic noise level increases from the existing baseline condition and the future (2022 and 2035) time horizons are attributable to the intermingled effects of both the cumulative development projects in the project vicinity and region as well as the project. This is a significant impact and mitigation is required.	Previously referenced Mitigation Measures 4.12.6.1A, 4.12.6.2A through 4.12.6.2C, 4.12.6.3A, and 4.12.6.4A will be implemented, but cumulative noise impacts will still be significant.	Significant and Unavoidable
4.13 Population, Housing, and Employment		
LESS THAN SIGNIFICANT IMPACTS		
Population Growth		
The project proposes to develop logistics warehouses which will result in minimal direct population increase in the City, although some workers may move to the City to work at this project, and some local residents will also work at this project. The project will not necessitate extension of major infrastructure and the project will not remove obstacles that will result in substantial population growth.	No mitigation is required.	Less than Significant
Displace Substantial Housing/People		
The existing seven rural residences on the site will eventually convert to “Light Logistics” uses. The project will eliminate the potential for the site to provide 388 units of affordable housing that were proposed under the Moreno Highlands Specific Plan. However, the City can meet its regional housing goals without these units, and the project is consistent with the City’s current Housing Element.	No mitigation required.	Less than Significant
SIGNIFICANT IMPACTS		
None	Not applicable	Not applicable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Cumulative Population, Housing, and Employment Impacts		
Implementation of the proposed WLC project would improve the City's jobs/housing ratio by creating thousands of new construction and permanent jobs in the City. Therefore, it will not result in cumulatively considerable impacts to population or housing.	No mitigation is required.	Less than Significant
4.14 Public Services and Facilities		
LESS THAN SIGNIFICANT IMPACTS		
Police Protection		
As development under the WLCSP, the need for police services will increase. Future projects will pay applicable development impact fees and contribute property taxes to fund needed police services.	No mitigation is required.	Less than Significant
Fire Protection		
As development under the WLCSP, the need for fire services will increase. Under the WLCSP, a new fire station site will be contributed to the City. Future projects will pay applicable development impact fees and contribute property taxes to fund needed police services.	No mitigation is required.	Less than Significant
Schools		
Future industrial development will contribute no new students to local schools. Payment of the school impact fees to the MVUSD and SJUSD will reduce potential impacts to school services and facilities to less than significant levels.	No mitigation is required.	Less than Significant
Parks, Recreation, Trails		
Development under the WLCSP is logistics warehousing which will not generate new City	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
residents who require additional parks and trails. The WLCSP proposes trail connections to Redlands Boulevard, Cactus Avenue, and the State-owned land to the south, plus a loop trail through the WLCSP site.		
New or Physically Altered Recreation and Park Facilities		
Development under the WLCSP is logistics warehousing which will not generate new City residents who require additional or altered parks.	No mitigation is required.	Less than Significant
Cumulative Public Services and Facilities Impacts		
As development occurs, the need for public services will incrementally increase. Anticipated property tax increases and payment of DIF fees to the City will effectively mitigation potential cumulative impacts to public services.	No mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
None	Not applicable	Less than Significant
4.15 Traffic and Circulation		
LESS THAN SIGNIFICANT IMPACTS		
Air Traffic Patterns		
The project site is not within two miles of a public airport or private airstrip, and there are no major air traffic patterns over or in the immediate vicinity of the project site.	No mitigation is required.	Less than Significant
Design Hazard Features		
The project site is currently vacant agricultural land with only two major roadways (Theodore Street and	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Alessandro Boulevard). Under the WLCSP, a complete arterial circulation network will eventually be constructed that will allow full truck access and minimize road-related hazards.		
Emergency Access		
The project site is currently vacant agricultural land with only two major roadways and minimal need for emergency services. Development under the WLCSP will eventually result in the construction of a complete arterial circulation network which will allow full access for emergency vehicles and services.	No mitigation is required.	Less than Significant
Alternative Transportation Policies, Plans, or Programs		
The project will create a complete roadway circulation network, install a loop trail system, have Class II bikeways and sidewalks on all internal arterial streets, and streets can accommodate bus turnouts when needed by the local transit agency.	Carpooling is required under Air Quality Mitigation Measure 4.3.6.4A. No additional mitigation is required.	Less than Significant
SIGNIFICANT IMPACTS		
Impact 4.15.6.1 Existing (2018) With Phase 1 Conditions Traffic and Level of Service		
Existing baseline (year 2018) with Phase 1 intersection levels of service for the study area intersections include 15 study intersections where Phase 1 of the project would have a significant impact. Twelve of these intersections already exceed the threshold of significance under existing conditions and would therefore be considered cumulative impacts and mitigation is required. Phase 1 of the project would cause a direct project impact at the other three intersections and mitigation is required.	**4.15.7.4A:** A traffic impact analysis ("TIA"), conforming to the guidelines for TIAs adopted by the City shall be submitted in conjunction with each Plot Plan application within the WLCSP. Prior to the approval of Plot Plans, the City shall review the Revised TIA to determine if any of the traffic improvements listed in the above tables need to be implemented as part of the plot plan. The TIA prepared for the Revised Sections of the FEIR are required to be completed prior to the issuance of a certificate of occupancy for each building. If the City determines that any of the improvements within Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated into insignificance, then the completion of construction of the improvements prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. Construction of	Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		improvements within the City shall be subject to reimbursement agreement for those costs that exceed the fair share contribution determined for the specific Plot Plan application. If the City determines that any of the improvements outside Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated to a less than significant level, then the payment of any necessary fair share contribution as prescribed in MM 4.15.7F prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. If the City determines that the traffic impacts which will result from the construction or operation of a building will be significantly more adverse than those shown in the Revised TIA, further environmental review shall be conducted prior to the approval of the Plot Plan pursuant to Public Resources Code § 21166 and CEQA Guidelines § 15162 to determine what additional mitigation measures, if any, will be required in order to maintain the appropriate levels of service.	
	4.15.7.4B:	As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the dedication of appropriate right-of-way, where feasible, consistent with the Subdivision Map Act for frontage street improvements contained within the World Logistics Center Specific Plan Circulation Map. Required dedications shall be made prior to the issuance of occupancy permits for the requested development.	
	4.15.7.4C:	As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the Applicant to construct or to fully fund the transportation measures identified in the development's TIA (see MM4.15.7.4A) as needed to mitigate the transportation impacts within the city of the Plot Plan development. The payment or construction shall be made prior to the issuance of occupancy permits for the requested development. This condition shall apply only to mitigation measures where a mechanism has been established to collect funds from the project and any other funds to needed to complete the improvements.	
	4.15.7.4D:	As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require each project to pay the requisite Transportation Uniform Mitigation Fee (TUMF) as set forth in Municipal Code Chapter 3.44.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		Required TUMF payments shall be made prior to the issuance of occupancy permits for the requested development.	
	4.15.7.4E:	In order to ensure that all of the Project's traffic impacts are mitigated to the greatest extent feasible, the Applicant shall contribute its fair share of the cost of the needed traffic improvements that are not within the City as identified in the Revised Traffic Impact Analysis, i.e., under the jurisdiction of other cities, the County of Riverside or Caltrans, pursuant to MM 4.15.7.4F. As used in this mitigation measure, the Applicant's "fair share" has been determined in compliance with the requirements of the Fee Mitigation Act, Government Code § 66000 et seq., and, pursuant to § 66001(g), does not require that the Applicant be responsible for making up for any existing deficiencies. Mitigation measures are summarized in Tables 4.15-1 to 4.15-13.	
	4.15.7.4F	The Applicant shall pay its portion of the fair share of the cost of traffic improvements identified in the Transportation Impact Analysis for those significantly impacted road segments and intersections for each warehouse building within the World Logistics Center if the impacted jurisdiction has established a fair share contribution program prior to the approval of a building-specific plot plan. The City shall determine whether a fair share program exists in the impacted jurisdiction and, if one does exist, require that the appropriate fees are paid by the Applicant, consistent with the requirements below, prior to the issuance of a certificate of occupancy for the building in question. If no fair share program exists or if the existing programs are not consistent with the requirements below, then no payment of fees shall be required. The impacts are to be determined on a road segment or intersection basis. Nothing in this condition requires the payment of a traffic impact fee imposed by another jurisdiction which covers improvement to facilities where the Project does not have a significant impact. Fair-share contributions will be determined on a building-by-building basis as a share of the impact of the Project as a whole (for each segment or intersection where the WLC project as a whole has a significant impact identified in the Revised Sections of the FEIR) as determined by the Revised Traffic Impact Analysis and will be due as each certificate of occupancy is issued. The fair share payments for the significantly impacted road segments and intersections identified in the Revised Sections of the FEIR will be required even though the impact resulting from a specific building does not, by itself, cause a significant impact.	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	For example, the intersection of Martin Luther King Blvd. and the I-215 northbound ramps (Intersection IN-85) in the City of Riverside was identified as a place where the WLC contributes to cumulatively significant impacts, and where the fair share contribution of the WLC project as a whole was computed to be 0.6%. If the City of Riverside establishes a fair share contribution program consistent with this MM to improve that intersection, then when a certificate of occupancy is to be issued for a 2-million sq. ft. high-cube warehouse in the WLC (approximately 5% of the entire WLC project) the amount of the fair share payment due from the Applicant to the City of Riverside would be computed as follows: Amount Due = Total cost of Improvement × Total World Logistics Center fair share (0.6%) as determined by Traffic Impact Analysis × % attributable to the building that is subject to the certificate of occupancy (5%) A × B × C = D A = % attributable to the building that is subject to the certificate of occupancy (5%) B = Total World Logistics Center fair share (0.6%) as determined by Traffic Impact Analysis C = Total cost of Improvement D = Amount Due A similar calculation would be done for each subsequent building, with payments for each due at the time of issuance of the certificate of occupancy. As a result, while each building individually would not produce a significant impact, and therefore would not be required to pay any mitigation fees if considered by itself, the total amount of the payments for all of the buildings would be equal to the fair share payment for the entire WLC to the extent that the responsible	

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures		Level of Significance
		jurisdiction has chosen to adopt a fair share contribution funding program consistent with MM 4.15.7.4F	
	4.15.7.4G	City shall work directly with WRCOG to request that TUMF funding priorities be shifted to align with the needs of the City, including improvements identified in this TIA. Toward this end, City shall meet regularly with WRCOG.	
Impact 4.15.6.2 Existing (2018) With Project (Buildout) Conditions Traffic and Level of Service Impacts			
When project traffic under buildout conditions is overlaid on existing roadway and freeway conditions, significant project-specific and cumulative traffic impacts will occur. Local and regional roadway and intersection impacts can be effectively mitigated, as outlined in the project TIA and described in the mitigation measures to the right. At this time, there is no effective mitigation for anticipated project impacts on local freeways. In addition, the City cannot control the timing of improvements required at locations outside of the City of Moreno Valley.	Implementation of previously identified Measures 4.15.7.4A through 4.15.7.4G as they apply to development that occurs from project opening until Buildout.		Significant and Unavoidable (see Cumulative Impacts)
Impact 4.15.6.3 Year 2025 with Project (Phase 1) Conditions Traffic and Level of Service Impacts			
The project will contribute significant amounts of traffic onto roadways and at intersections in the City of Moreno Valley and other cities, and area freeways, during Phase 1 development (approx. 2020 to 2025).	Implementation of previously identified Measures 4.15.7.4A through 4.15.7.4G as they apply to development that occurs from project opening until Year 2025 (considered to be Phase 1).		Significant and Unavoidable
Impact 4.15.6.4 Cumulative Impacts - General Plan Buildout (Year 2040) With Project Conditions Traffic and Level of Service Impacts			
The project will contribute significant amounts of traffic onto roadways and at intersections in the City of Moreno Valley and other cities, and area freeways, after completion of development under the WLCSP (i.e., after 2025).	Implementation of previously identified Measures 4.15.7.4A through 4.15.7.4G for development as it occurs during development under the WLCSP.		Significant and Unavoidable

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
4.16 Utilities and Service Systems		
LESS THAN SIGNIFICANT IMPACTS		
Construction or Expansion of Water Treatment Facilities		
The project can connect to the existing water supply and will not require the construction of any new water storage or treatment facilities.	No mitigation is required.	Less than Significant
Cumulative Water Supply		
The EMWD has determined that it will be able to provide adequate water supply to meet the potable water demand for the project area, including existing and future users, when planned groundwater storage improvements are completed.	No mitigation is required.	Less than Significant
Wastewater Treatment Requirements		
Expected wastewater flows from the proposed WLC project will not exceed the capabilities of the serving treatment plant.	No mitigation is required.	No Impact
Wastewater Treatment Capacity and/or New or Expanded Wastewater Facilities		
The proposed WLC project would not require the construction of new wastewater treatment facilities or expansion of existing facilities, which could cause significant environmental effects.	No mitigation is required.	Less than Significant
Cumulative Wastewater Treatment		
The project, in conjunction with planned and future development within the service area, will incrementally increase the need for wastewater treatment over the long-term. However, the project itself would not require the construction of new wastewater treatment facilities or expansion of existing facilities.	No mitigation is required.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Solid Waste Facilities		
Adequate daily surplus capacity exists at the receiving landfill, so project development would not significantly impact current operations or the expected lifetime of the landfill serving the project area.	No mitigation is required.	Less than Significant
Solid Waste Reduction		
The project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, state, and federal solid waste disposal standards, thereby ensuring that the solid waste stream to the Badlands Sanitary Landfill is reduced in accordance with existing regulations.	Implementation of previously identified Air Quality Mitigation Measure 4.3.6.4B will help reduce long-term production of solid waste from the site, and no additional mitigation is required.	Less than Significant
Cumulative Solid Waste		
The project, in conjunction with planned development in the surrounding region, will contribute increased volumes of solid waste to local landfills. However, these volumes will not exceed the capabilities of the County's waste management system. Consequently, cumulative impacts associated with solid waste within the City would be considered less than significant.	Implementation of previously identified Air Quality Mitigation Measure 4.3.6.4B will help reduce long-term production of solid waste from the site.	Less than Significant

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
SIGNIFICANT IMPACTS		
Impact 4.16.1.6.1 Adequate Water Supply		
The Water Supply Assessment prepared for the project by Eastern Municipal Water District determined there were sufficient supplies of water to serve the project. However, the supply of water imported from the State is not currently guaranteed, so there may be significant impacts related to long-term water supply.	**4.16.1.6.1A** Prior to approval of a precise grading permit for each plot plan for development within the World Logistics Center Specific Plan (WLCSP), the developer shall submit landscape plans that demonstrate compliance with the World Logistics Center Specific Plan, the State of California Model Water Efficient Landscape Ordinance (AB 1881), and Conservation in Landscaping Act (AB 325). This measure shall be implemented to the satisfaction of the Planning Division. Said landscape plans shall incorporate the following: • Use of xeriscape, drought-tolerant, and water-conserving landscape plant materials wherever feasible and as outlined in Section 6.0 of the World Logistics Center Specific Plan; • Use of vacuums, sweepers, and other "dry" cleaning equipment to reduce the use of water for wash down of exterior areas; • Weather-based automatic irrigation controllers for outdoor irrigation (i.e., use moisture sensors); • Use of irrigation systems primarily at night or early morning, when evaporation rates are lowest; • Use of recirculation systems in any outdoor water features, fountains, etc.; • Use of low-flow sprinkler heads in irrigation system; • Provide information to the public in conspicuous places regarding outdoor water conservation; and • Use of reclaimed water for irrigation if it becomes available. **4.16.1.6.1B** All buildings shall include water-efficient design features outlined in Section 4.0 of the World Logistics Center Specific Plan. This measure shall be implemented to the satisfaction of the Land Development Division/Public Works. These design features shall include, but not be limited to the following: • Instantaneous (flash) or solar water heaters; • Automatic on and off water facets; • Water-efficient appliances;	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
	• Low-flow fittings, fixtures and equipment; • Use of high efficiency toilets (1.28 gallons per flush [gpf] or less); • Use of waterless or very low water use urinals (0.0 gpf to 0.25 gpf); • Use of self-closing valves for drinking fountains; • Infrared sensors on drinking fountains, sinks, toilets and urinals; • Low-flow showerheads; • Water-efficient ice machines, dishwashers, clothes washers, and other water-using appliances; • Cooling tower recirculating system where applicable; • Provide information to the public in conspicuous places regarding indoor water conservation; and • Use of reclaimed water for wash down if it becomes available. **4.16.1.6.1C** Prior to approval of a precise grading permit for each plot plan, irrigation plans shall be submitted to and approved by the City demonstrating that the development will have separate irrigation lines for recycled water. All irrigation systems shall be designed so that they will function properly with recycled water if it becomes available. This measure shall be implemented to the satisfaction of the City Planning Division and Land Development Division/Public Works.	
Impact 4.16.1.6.2 Storm Water Drainage Requirements		
The development of the proposed WLC project would introduce a substantial amount of impervious surfaces on the site, which could result in significant increases in off-site runoff.	**4.16.1.6.2A** Each Plot Plan application for development shall include a concept grading and drainage plan, with supporting engineering calculations. The plans shall be designed such that the existing sediment carrying capacity of the drainage courses exiting the project area is similar to the existing condition. The runoff leaving the project site shall be comparable to the sheet flow of the existing condition to maintain the sediment carrying capacity and amount of available sediment for transport so that no increased erosion will occur downstream. This measure shall be implemented to the satisfaction of the City Land Development Division/Public Works.	Less than Significant with Mitigation

Table 1.1: World Logistics Center Project Environmental Impact Summary

Issues/Impacts	Mitigation Measures	Level of Significance
Cumulative Impacts to Water Supply Services		
The proposed WLC project would connect to existing conveyance infrastructure and adequate treatment capacity is available, so the proposed WLC project would not make a significant contribution to any cumulatively considerable impacts on water supply or infrastructure.	Mitigation not required	Less than Significant with Mitigation
4.17 Energy (New Section)		
LESS THAN SIGNIFICANT IMPACTS		
Energy Consumption and Generation		
The project would not result in energy use or consumption that would cause wasteful, inefficient, and unnecessary consumption of energy.	No mitigation is required.	Less than Significant
Cumulative Energy Facilities and Consumption		
The WLC project, in conjunction with planned development in the region, will increase energy consumption as development occurs. The project will adhere to Title 24 and the California Green Building Code, and will exceed Title 24 energy consumption guidelines by at least 10 percent. Therefore, the project will not make a significant contribution to energy facilities or consumption.	No mitigation is required.	Less than Significant

NOTE TO READERS: The absence of reference to a portion of Section 2.0 means that the corresponding portion of Section 2.0 in the FEIR remains unchanged or has been deleted.

2.0 INTRODUCTION AND PURPOSE

In August, 2015, the City Council of the City of Moreno Valley (City) certified a Final Programmatic Environmental Impact Report (FEIR), which analyzed the environmental impacts that would result from the construction and operation of the World Logistics Center (WLC), as having been prepared in compliance with the California Environmental Quality Act (CEQA) The City Council the approved a General Plan Amendment ("GPA"), a Zone Change ("Zone Change"), the World Logistics Center Specific Plan ("WLC Specific Plan"), a financing and conveyancing Parcel Map ("Parcel Map 36457"), a Development Agreement ("Development Agreement") and a request that 85 acres in an unincorporated portion of Riverside County be annexed into the City. In September, 2015, a number of lawsuits were filed challenging the City's certification of the FEIR and the approvals granted for the construction and operation of the WLC.

In November, 2015, the City Council, in response to initiative petitions submitted to it for the GPA, the Zone Change, the WLC Specific Plan and the Development Agreement, vacated approvals for those entitlements granted in August, and then readopted the GPA, the Zone Change, the WLC Specific Plan and the Development Agreement. The Tentative Parcel Map (36547) was not part of the Initiative adoption and is not currently approved. The World Logistics Center Specific Plan is entitled for 40.6 million square feet of logistics and associated infrastructure land uses on the 2,610-acre project site.

In a court ruling dated February, 8, 2018, the Honorable Sharon J. Waters, Judge of the Riverside County Superior Court, identified five deficiencies in the FEIR. The key findings from Judge Waters' ruling are quoted below:

- **Energy Impacts**: "The FEIR must provide a comparison of feasible, cost-effective renewable energy technologies in the Energy Impacts analysis".
- **Biological Impacts**: "The FEIR should remove all references to and consideration of the 910 acres of SJWA and MSHCP lands as "buffer zone" or "CDFW Conservation Buffer Area" in the Biological Resources and Habitat Impacts analysis".
- **Noise Impacts**: "The FEIR must provide an analysis of construction noise over ambient levels; provide adequate analysis on construction noise impacts on nearby homes; address the inadequacy of mitigation measures, which fail to include performance standards or ways to reduce construction noise".
- **Agricultural Impacts**: "The FEIR and the resolution certifying the FEIR require clarification as to whether loss of locally important farmland will have a significant direct or cumulative impact on agriculture and, if significant, the FEIR must either explain how proposed mitigation will reduce the impact or why other mitigation is not feasible".
- **Cumulative Impacts**: "The FEIR should include consideration of recently constructed and proposed large warehouse projects in the summary of projections method, and should analyze whether individually significant impacts may be cumulative considerable".

In a writ of mandate issued on June 12, 2018, the Judge order the City to set aside its certification of the FEIR and its approval of the Parcel Map. The remaining approvals – the GPA, Zone Change, World Logistics Center Specific Plan, Annexation Request and Development Agreement granted in November, 2015 – and those entitlements remain in effect.

This Revised Sections of the FEIR has been prepared to respond to the Judge's ruling and writ by correcting the five deficiencies identified in the ruling. With respect to cumulative impacts, the Judge's ruling did not indicate the specific environmental topics to be evaluated, and thus, to ensure compliance

with the ruling, this Revised Sections of the FEIR includes an analysis of potential cumulative impacts for all environmental topics, even those never raised in the Superior Court proceedings. While such information may not be required to comply with the Judge's ruling, it is included here to account for the most conservative interpretation of the Judge's ruling. The court will have the discretion to determine whether it was required to comply with the writ or not. The Revised Sections of the FEIR evaluate the current environmental baseline conditions, impacts and any required additional or revised mitigation measures associated with the construction and operation of the World Logistics Center.

Using this interpretation of the Judge's ruling for cumulative impacts, this Revised Sections of the FEIR includes a revised analysis of the WLC's potential transportation impacts to incorporate the cumulative impacts of additional projects, although the FEIR's section on Transportation and Traffic (Section 4.15) was upheld by Judge Waters. Although not required by the Judge's ruling, this section has also been prepared to reflect the latest trip generation rates found in the Institute of Transportation Engineers' Trip Generation Manual (10^{th} ed., 2017). The revised traffic analysis also forms the basis for revised analyses of air quality, greenhouse gases and traffic noise, even though those sections of the FEIR were upheld by the court (Sections 4.3, 4.7 and portions of 4.12).

The Revised Sections of the FEIR are being circulated to the public for review and comment. Written responses to those comments will then be prepared. A Revised FEIR, which will consist of this Revised Sections of the FEIR, the comments and responses and the portions of the FEIR that were found to be in compliance with CEQA after trial, will be considered by the City.

Because the Judge found that substantial portions of the FEIR did comply with CEQA, only this Revised Sections of the FEIR is being circulated for public review and comment. This Revised Sections of the FEIR presents additional environmental analyses necessary to respond to the Judge's ruling. Some portions of this Revised Sections of the FEIR adds to the FEIR, e.g., new Section 4.17 (Energy), or provides additional information on the same topic, e.g., Section 2.1 (Document Format). Elsewhere in this Revised Sections of the FEIR, individual sections have been revised and replace the corresponding sections in the FEIR (Air Quality, Biological Resources, Greenhouse Gas Emissions/Climate Change). The Revised Sections of the FEIR also identify certain specific portions of the FEIR (Project Description) that are no longer applicable to the CEQA analysis, which identifies the GPA, Zone Change, the World Logistics Center Specific Plan, Annexation Request and the Development Agreement as a discretionary action anticipated to be taken by the City.

For clarity, although the GPA, Zone Change, WLC Specific Plan, Annexation Request and Development Agreement were approved by the City in compliance the initiative process set forth in the California Elections Code, this Revised Sections of the FEIR in combination with the valid portions of the FEIR, serves to evaluate the environmental effects of the World Logistics Center project.

The absence of any reference to a section of the FEIR in this Revised Sections of the FEIR means that the corresponding section in the FEIR remains unchanged because the Judge found that it complied with CEQA.

The reader should note that each section within Section 4.0 of the FEIR contained a subsection analyzing cumulative impacts. Those subsections are no longer applicable and have been replaced with a new Section 6.0.

Finally, the FEIR sometimes refers to Theodore Street. It has since been renamed World Logistics Center Parkway south of SR-60.

2.1 Document Format

As noted above, the Judge's ruling identified five areas where the FEIR failed to comply with CEQA. The ruling requires that the Revised Sections of the FEIR: (1) provide a comparison of feasible, cost-effective renewable energy technologies in the Energy Impacts analysis; (2) remove references to and

consideration of the northernmost 910 acres of the San Jacinto Wildlife Area (SJWA) as a "buffer zone" or the "CDFW Conservation Buffer Area" in the Biological Resources analysis; (3) provide an analysis of construction noise over ambient levels, provide adequate analysis of construction noise impacts on nearby homes, and address inadequate mitigation measures, which fail to include performance standards or ways to reduce construction noise; (4) clarify as to whether loss of farmlands of local importance was significant and, if so, how it would be mitigated, if feasible; and (5) consider recently constructed and proposed large warehouse projects to determine whether they will result in cumulatively significant impacts.

This Revised Sections of the FEIR responds to each of the five areas as follows:

> **(1) Renewable Energy**: A new section dealing with renewable energy technologies, Section 4.17, has been prepared and is included in this Revised Sections of the FEIR. In addition, a new Appendix E, World Logistics Center, Comparison of Renewable Energy Technologies, has been prepared and is included in this Revised Sections of the FEIR.
>
> (**2) Biological Resource**s: References to and consideration of the SJWA as a "buffer zone" or "CDFW Conservation Buffer Area" have been removed from Section 4.4, Biological Resources, and a revised version of that section has been prepared. These terms have also been removed in all other relevant sections of the FEIR. Those sections, as revised, have also been included in these Revised Sections of the FEIR.
>
> **(3) Construction Noise**: Those portions of Section 4.12, Noise, dealing with construction noise and mitigation measures have been revised and are included herein. In addition, a revised Appendix K, Noise Technical Report, has been prepared and is included in the appendices.
>
> **(4) Farmlands of Local Importance**: Those portions of Section 4.2, Agricultural and Forestry Resources, dealing with the loss of farmland of local importance have been revised and are included herein.
>
> **(5) Cumulative Impacts**: A new Section 6.0, Cumulative Impacts, has been prepared and is included herein. Over 360 recent past, present and reasonably foreseeable projects that could cumulatively contribute to the World Logistics Center's environmental impacts have been identified and considered. These are in addition to the contributions of projects reflected in various planning documents.

As mentioned, the Revised Sections of the FEIR also includes revised analyses in Traffic and Circulation, and in Appendix F, Traffic Impact Analysis (TIA), Section 4.15, in Air Quality, Section 4.3, and in Appendix D, Air Quality/Health Risk/Greenhouse Gases, Noise, Section 4.12, and in Appendix C, Noise. It should also be noted that the methodologies used to determine the environmental impacts have not been changed. As an example, the same general approach, LOS methodologies, and thresholds that were used in the 2014 TIA were repeated in the 2018 TIA; although the input data and study years were updated to reflect the best available current information.

2.2 Process for Revised Sections of the FEIR

CEQA requires the Lead Agency to consider the information contained in an EIR prior to taking any discretionary action on a project. This Revised Sections of the FEIR corrects deficiencies found by the court to exist in the FEIR and provides information to the Lead Agency and other public agencies, the general public, and decision-makers regarding the potential environmental impacts from the construction and operation of the World Logistics Center project. The purpose of the public review of an EIR is to evaluate the adequacy of the environmental analysis in terms of compliance with CEQA. Section 15151 of the *CEQA Guidelines* states the following regarding standards from which adequacy is judged:

> "An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have not looked for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the *CEQA Guidelines*, and provides the information needed to assess the environmental consequences of a proposed project. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

Under CEQA (PRC Section 21002.1[a]):

> "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the proposed project, and to indicate the manner in which those significant effects can be mitigated or avoided."

This Revised Sections of the FEIR has been prepared to correct deficiencies found by the court to exist in the FEIR by evaluating some of the potential environmental impacts associated with the construction and operation of the World Logistics Center project which will include 40.6 million square feet of logistics warehouse facilities, as well as its associated infrastructure. ESA (ESA) has prepared this Revised Sections of the FEIR under the direction of professional City planning staff. However, prior to certification of the Revised FEIR, the City must independently review the methodologies used, and conclusions reached in the Revised Sections of the FEIR. The City is undertaking an independent review of the Revised Sections of the FEIR by having City planning staff work with ESA on the document, and by employing a third-party consultant to independently review it as well. If certified by the City, the information included and the conclusions reached in the Revised Sections of the FEIR will therefore represent the City's independent judgment.

This Revised Sections of the FEIR has been prepared utilizing information from City planning and environmental documents, applicant-provided technical studies, and other publicly-available data. Additional mitigation measures that would offset, minimize, or otherwise avoid significant environmental impacts from the World Logistics Center project have been identified, where required. This document has been prepared in accordance with CEQA, California Public Resources Code §21000 *et seq.*; the *Guidelines for California Environmental Quality Act* (California Code of Regulations, Title 14, Chapter 3); and the rules, regulations, and procedures for implementing CEQA as adopted by the City. The objective of the Revised Sections of the FEIR is to inform City decision-makers, representatives of other affected/responsible agencies, the public, and other interested parties of the potential environmental consequences that were not adequately dealt with in the FEIR that may be associated with the approval and implementation of the WLC project.

2.3 Incorporated Documents

The CEQA Guidelines (§15150) permits the incorporation by reference of all or portions of other documents that are generally available to the public. Any document incorporated by reference is required to be made available to the public for inspection at a public place or public building and requires that the EIR state where the incorporated documents will be made available for public inspection. The following documents have been incorporated by reference:

City of Moreno Valley General Plan, various elements, adopted by City Council Resolution No. 2006-83, July 11, 2006, and last updated October 2006.

City of Moreno Valley General Plan Final Environmental Impact Report, certified July 2006.

City of Moreno Valley General Plan Land Use Map, last updated November, 2017.

City of Moreno Valley Zoning Atlas, last updated November 2017.

City of Moreno Valley Municipal Code (various chapters), last updated February 2012.

Moreno Highlands Specific Plan EIR, adopted 1992.

World Logistics Center Initiative, November 24, 2015

2.4 Technical Reports

Various technical or project-related reports have been prepared to assess specific issues that may result from the construction and operation of the project. As relevant, information from the following documents and technical reports has been integrated into the Revised Sections of the FEIR as appendices:

"The World Logistics Center Specific Plan" (Highland Fairview) original dated January 30, 2013, revised dated September 2014.

"An Agricultural Industry Analysis of the Inland Empire" (Andrew Chang & Co.), original dated March 2012, revised September 2014.

"Agricultural Resources Assessment for the WLCSP" (Parsons Brinckerhoff), original dated March 2012, revised December 2013.

"Agricultural Assessment for the WLCSP" (Cushman and Wakefield) new report dated December 20, 2013 (prepared for Final EIR in response to comments) and revised September 2014.

"Air Quality, Greenhouse Gas, and Health Risk Assessment for the WLCSP" (MBA), original dated January 2013, revised April 2015.

"Habitat Assessment, MSHCP Consistency Analysis, and JPR Review" (MBA), original dated December 20, 2012, revised September 2014.

"Delineation of Jurisdictional Waters and Wetlands" (MBA), original dated November 2012, revised September 2014.

"Phase I and Phase II Cultural Resources Assessment" (MBA), original dated May 2012, revised September, 2014.

"Preliminary Geotechnical Investigation" (Leighton), original dated March 23, 2012, revised September 2014.

"Supplemental Geotech Assessment for Offsite Improvements Related to the WLCSP" (Leighton), original dated March 23, 2013, revised September 2014.

"Phase 1 Environmental Site Assessments" (various dates, LOR Geotechnical) (not revised).

"Draft Master Plan of Drainage Study" (CH2MHill) original dated November 2012, revised dated September 2014.

"Preliminary Water Quality Management Plan" (CH2MHill) original dated November 2012, revised September 2014.

"Noise Assessment for the WLCSP" (Mestre Greve Associates) original dated January 2013, revised September 2014.

"Traffic Impact Assessment (TIA) for the WLCSP" (Parsons Brinckerhoff) original dated January 2013, revised September 2014.

"NAIOP Assessment of Available High-Cube Trip Generation Rates" (Kunzman Associates), December 20, 2011.

"Water Supply Assessment for the WLCSP" (Eastern Municipal Water District), March 21, 2012.

"Highlands Water Budget" (CH2MHill), original dated December 2012, revised September 2014.

"Water System Modeling Results" (CH2MHill), original dated December 2012, revised dated October 22, 2013.

"Sewer and Reclaimed Wastewater Memorandum" (CH2MHill), original dated April 25, 2012, revised September 2014.

"Dry Utilities – Technical Memorandum" (Utility Specialists), original dated December 20, 2012, revised September 2014.

"Electrical System Forecast of Utility Infrastructure" (MVU Engineering), original dated December 2012, revised September 2014.

"Fiscal and Economic Impact Study for the World Logistics Center" (David Taussig and Associates), original dated January 15, 2013, revised September 2014.

Hydrology and Water Quality Memorandum (Woodard Curran), 2018

Traffic Impact Assessment (WSP), 2018

Energy Assessment (WSP),2018

Transportation Energy Assessment (ESA), 2018

Air Quality Assessment (ESA), 2018

Noise Assessment (ESA), 2018

Greenhouse Gas Assessment (ESA), 2018

Health Risk Assessment (ESA), 2018

Biological Resources Assessment (ESA), 2018

Sensitive Species Surveys (ESA), 2018

In addition to their inclusion in their entireties as appendices to the Revised Sections of the FEIR, these documents are available for review at the following location:

Moreno Valley City Hall
Community & Economic Development Department
Planning Division
14177 Frederick Street
Post Office Box 88005
Moreno Valley, California 92552
Phone: (951) 413-3238
Monday–Thursday 7:30 a.m.– 5:30 p.m.
Friday 7:30 a.m. – 4:30 p.m.

2.5 Public Review of the Revised Sections of the FEIR

This Revised Sections of the FEIR will be distributed to responsible and trustee agencies, other affected agencies, and interested parties. Additionally, in accordance with Public Resources Code Section 21092(b)(3), this document will be provided to all parties who previously requested copies. The Notice

of Completion (NOC) and Notice of Availability (NOA) of the EIR is being distributed for a 45-day public review period. During the public review period, the Revised Sections of the FEIR and the revised technical appendices will be made available for review. Written Comments should be addressed to:

Albert Armijo, Interim Planning Manager
14177 Frederick Street
Post Office Box 88005
Moreno Valley, California 92552
Phone: (951) 413-3206
Email: alberta@moval.org

After the public review period, written responses to comments on the Revised Sections of the FEIR will be prepared. These responses will be available for review for a minimum of 10 days prior to the public hearings before the City, at which time the certification of the Revised FEIR will be considered. The Revised FEIR (which includes the Revised Sections of the FEIR, the public comments and responses to the Revised Sections of the FEIR and the portions of the FEIR found to comply with CEQA) will be included as part of the environmental record for consideration by the City decision-makers. The City will respond as appropriate to comments made at public hearings on the WLC Project and Revised Sections of the FEIR.

2.6 Mitigation Monitoring and Reporting Program

The Mitigation Monitoring and Reporting Program (MMRP) will be revised to comply with the requirements of State law (Public Resources Code Section 21081.6) and the court's ruling and writ. When mitigation measures are required to avoid or reduce the severity of significant impacts, State law requires the adoption of an MMRP. The monitoring program is intended to ensure compliance during implementation of the program.

2.7 Potential Impacts of the Project Discussed in the Revised Sections of the FEIR

The Revised Sections of the FEIR focuses on the areas of concern identified by the court ruling and writ.

The following seven environmental topics are addressed in the project impacts section (Section 4.0) of these Revised Sections of the FEIR:

- Agriculture and Forestry Resources (loss of farmland of local importance)
- Biological Resources
- Energy
- Noise
- Traffic
- Air Quality
- Greenhouse Gas Emissions

The following seventeen environmental topics are addressed in the cumulative impact sections (Section 6.0) of the Revised Sections of the FEIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality, including Human Health
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology, and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population, Housing, and Employment
- Public Services and Facilities
- Transportation and Traffic
- Utilities and Service Systems
- Energy

2.8 Cumulative Impacts

Cumulative Impacts are discussed in Section 6.0 of these Revised Sections of Final EIR.

NOTE TO READERS: The project as originally proposed to the City, and as described in the FEIR, included both the World Logistics Center and a General Plan Amendment and a rezoning of land south of the World Logistics Center site to reflect their open space nature. The General Plan Amendment and rezoning have since been accomplished through the initiative process. The description of the World Logistics Center has not changed. It should be noted that Theodore Street has been renamed World Logistics Center Parkway, south of SR-60.

The Revised Sections of the Final EIR (FEIR) sets forth those portions of Section 3.0 that have been revised. Revisions to, and deletions from, the FEIR have been identified in a separate document, available for review at the City of Moreno Valley. The absence of any reference to a portion of Section 3.0 means that the corresponding portion of Section 3.0 in the FEIR remains unchanged or has been deleted. However, where appropriate, unrevised portions of the FEIR have been included for ease of understanding.

3.0 PROJECT DESCRIPTION

The World Logistics Center is located on 2,610 acres in the Rancho Belago area at the eastern end of Moreno Valley, south of SR-60, east of Redlands Boulevard, west of Gilman Springs Road and north of the San Jacinto Wildlife Area. The site currently has a General Plan designation of Business Park/Light Industrial and zoning designations of WLCSP-LD (World Logistics Center Specific Plan – Logistics Development) and WLCSP-LL (World Logistics Center Specific Plan – Light Logistics). The site is subject to the adopted World Logistics Center Specific Plan which authorizes the construction and operation of 40,600,000 square feet of logistics facilities and associated infrastructure. The land use plan in the Specific Plan is shown in Figure 3-8 and is also shown in this section in Figure 3-1.

All of the land use entitlements for the World Logistics Center are in place – the General Plan and zoning designations, the Specific Plan, a request for annexation of 85 acres of unincorporated land in Riverside County into the City and a development agreement – having been adopted in November, 2015, through the initiative process.

3.3.13 Phasing

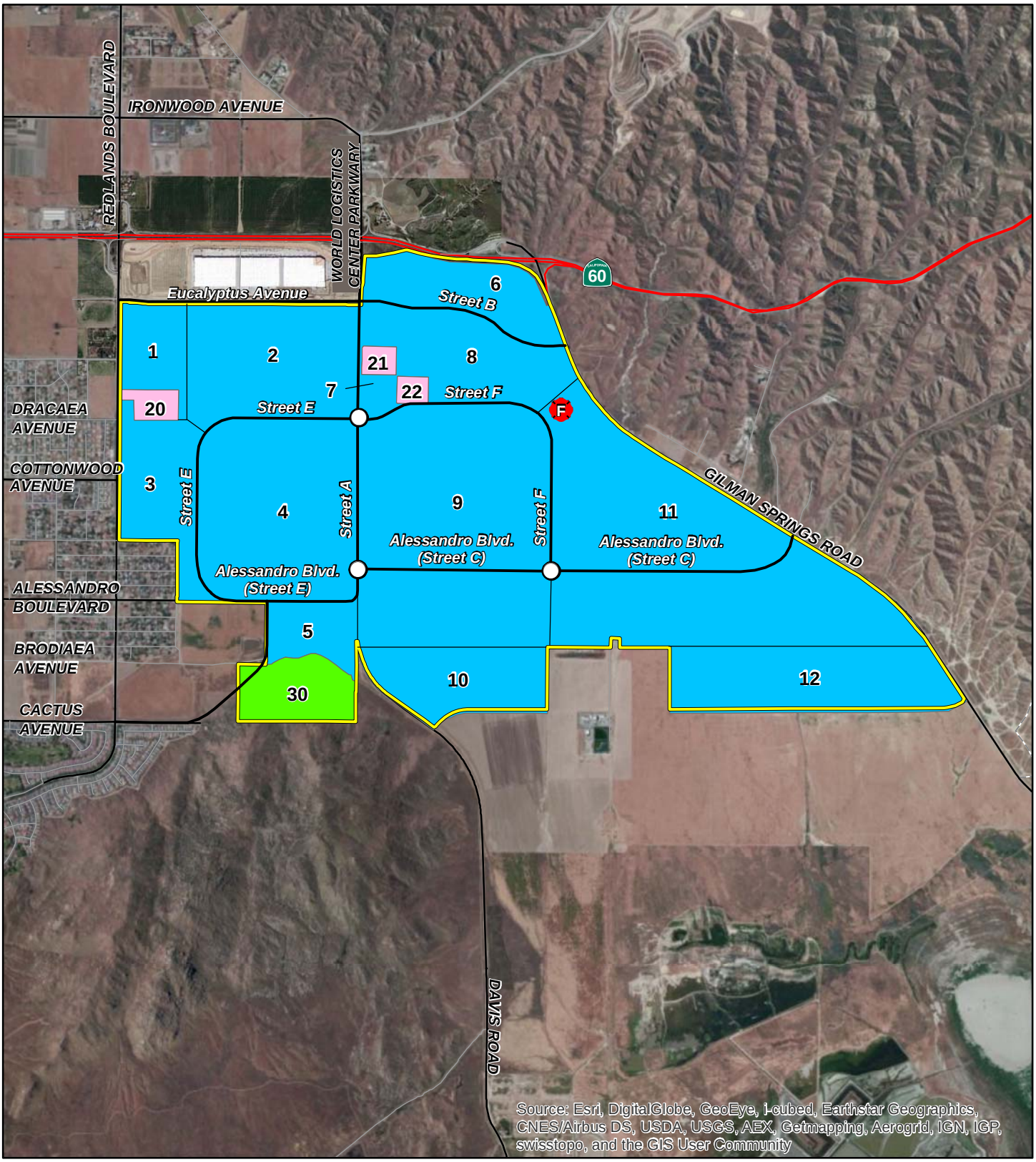
Development of the WLC project is planned over a period of fifteen years, from 2020 through 2035.

Under this projected development schedule, the project will absorb an average of approximately 2.7 million square feet of new development each year from 2020 to 2035, with actual development phasing and square footage buildout based on future market conditions. Section 8.0 of the Specific Plan, *Project Phasing*, suggests that development will likely occur in two large phases, starting in the western portion of the site south of Eucalyptus Avenue This phasing concept is based on beginning construction where infrastructure presently exists and expanding southerly and easterly. It is anticipated that Phase 1 would be completed by 2025 and would contain approximately 50% of development or approximately 20,300,000 square feet of logistics warehouse uses. Phase 2 anticipates full development build-out by 2035. Figure 3.19 in the FEIR shows the proposed phasing plan.

As stated in the Specific Plan, project phasing predictions are conceptual. The actual amount and timing of development will be dependent upon numerous factors, many of which are outside the control of the City or the developer, including interest by building users, private developers and local, regional, and national economic conditions. These and other factors acting together will ultimately determine the location and rate at which development within the project area occurs.

The framework for development of the area will be in accordance with the Specific Plan, which identifies the type and intensity of land uses permitted within the project. It is anticipated that development of the project would occur over time, as the result of the construction of multiple separate independent projects of varying sizes and configurations. Each of these future projects would be required to be consistent with the General Plan and zoning and would comply with all applicable regulations of the Specific Plan.

Table 3.E in the FEIR provides an estimate of the rate at which the project area could be built out, consistent with the Specific Plan, and estimated levels of construction projected to occur during each phase of development. Table 3.E in the FEIR also includes the approximate amount of equipment anticipated to be used during construction of the project. Project phasing is summarized in Table 3.1.



LSA

N

0 1,500 3,000

FEET

- Project Boundary
- Light Logistics
- Logistics Development
- Open Space
- Fire Station Site
- 1 Planning Area Number

SOURCE: ESRI World Imagery, 2010; Bing Maps, 2010; Google Maps, 2011.

Figure 3.1

World Logistics Center Specific Plan Project Environmental Impact Report

Specific Plan Land Uses

Table 3.1: Estimated Construction Equipment and Phasing (2020–2035)

Activity/Equipment	#	Duration (months)	Phase 1–		Phase 2–	
			Start	End	Start	End
Mass Grading/Excavation						
Dozers (D8R, D9, D10)	4-21	96	The equipment will be used from January 1 to December 31 during the following years: 2020, 2022, 2024, and 2026		For the years 2027 to 2029 equipment will be used from October 1 to March 31 of the following year. For the years 2032, 2033, and 2035 equipment will be used from January 1 to June 30.	
Scraper (651E)	6-30					
Compactor (824C, 834)	2-6					
Motor Grader (140G)	1-3					
Service/Support Truck	7-27					
Other Dozers (D6M, 550)	2-9					
Other[1]	8-18					
Finish Grading						
Dozer (D6M, 550)	3-9	32	Equipment will be used two months out of the following years 2020, 2022, 2024, and 2026		Equipment will be used two months out of the following years 2027, 2028, 2029, 2030, 2032, 2023, and 2035	
Backhoe (420D)	1-3					
Water Truck	1-3					
Service/Support Truck	1-3					
Building						
Backhoe (590)	6	186	July 1, 2020	December 31, 2026	January 1, 2027	December 31, 2035
Concrete Truck	36					
Excavators (9060, 270, 240, mini)	16					
Material Delivery Trucks	11					
Forklift (420 and 544D)	10					
Case and Skip Loaders[2]	28					
Service/Support Truck	24					
Other[3]	12					
Utilities						
Excavators[4]	26-30	186	July 1, 2020	December 31, 2026	January 1, 2027	December 31, 2035
Loaders	8					
Water Truck	17					
Backhoe (420)	2					
Service/Support Trucks	18					
Delivery Trucks	10					
Concrete Trucks	8					
Other[5]	4-8					
Interchange						
Dozer (D9, D10)	1	18	January 1, 2025	September 30, 2026	--	--
PW Scraper (623)	1					
Excavator (324)	1					
Backhoe (430)	1					
Crane	1					
Concrete Truck	4					
Service/Support Truck	4					

Table 3.1: Estimated Construction Equipment and Phasing (2020–2035)

Activity/Equipment	#	Duration (months)	Phase 1–		Phase 2–	
			Start	End	Start	End
Drill Rig	1					
Dump Truck	5					
RT Wheel Loader (950)	1					
Concrete Screed Mach.	1					
Skip Loader (414)	1					
Dozer (D5, D6)	1					
Motor Grader (14M)	1					
Curbing						
Curb Machine/Screed	2	62	July 1, 2020[1]	December 31, 2026	January 1, 2027	December 31, 2035
Skip Loader (210)	1					
Concrete Truck	6					
Service/Support Truck	4					
Paving						
Roller/Paving/Blade/ Scraper	10	32	January 1, 2020[2]	December 31, 2026	January 1, 2027	December 31, 2035
Skip Loader	4					
Bottom Dump Truck	4					
Delivery Truck	7					
Service/Support Truck	6					
Landscaping						
Loader (310G, 210LE, 544J)	6	186	January 1, 2020	December 31, 2026	January 1, 2027	December 31, 2035
Water Truck	2					
Excavator (mini) /Lift (544D)/ Steer (S190R)	6					
Trencher (RT-45)	2					
Service/Support Truck	14					

Source: Highland Fairview

1. Includes: Water Puller, 420D Backhoe, water trucks, support trucks
2. Includes: 414, 721, cat skip loader, 310G, 210LE, 544J
3. Includes: boom pump/truck, water truck, trencher, skid steer, water truck
4. Includes: 65,000 lbs to 175,000 lbs, 250G, and cat mini
5. Includes: dump truck, crane, fork lift

[1] Two months a year
[2] Four weeks a year

NOTE TO READERS: This portion of the Revised Sections of the FEIR replaces Sections 4.2, 4.3, 4.4, 4.7, and 4.15. of the FEIR. A new Section 4.17 has been added. The cumulative portions of Chapter 4.0 have been deleted from the FEIR to allow for their reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Chapter 6.0 of this Revised Sections of the FEIR.

The Revised Sections of the Final EIR (FEIR) sets forth those portions of Section 4.0 that have been revised. Revisions to, and deletions from, the FEIR have been identified in a separate document, available for review at the City of Moreno Valley. The absence of any reference to a portion of Section 4.0 means that the corresponding portion of Section 4.0 in the FEIR remains unchanged or has been deleted.

4.0 ENVIRONMENTAL IMPACT EVALUATION

There are 17 environmental issue areas that are analyzed in this Revised Sections of the FEIR. Issue areas highlighted in bold remain valid in the FEIR and no additional analysis is included herein:

4.1 Aesthetics
4.2 Agriculture and Forestry Resources
4.3 Air Quality
4.4 Biological Resources
4.5 Cultural Resources
4.6 Geology and Soils
4.7 Greenhouse Gas Emissions, Energy Conservation, and Global Climate Change
4.8 Hazards and Hazardous Materials
4.9 Hydrology and Water Quality
4.10 Land Use and Planning
4.11 Mineral Resources
4.12 Noise
4.13 Population, Housing, and Employment
4.14 Public Services
4.15 Transportation and Traffic
4.16 Utilities and Service Systems
4.17 Energy (New)

Those portions of the FEIR that have been found to be deficient by the Superior Court have been updated. In addition, because of the inclusion of additional past, present and reasonably foreseeable projects and the issuance of a new Trip Generation Manual, the Traffic and Circulation section has been updated. That section also serves as the basis for analyzing the World Logistic Center's air quality, greenhouse gas and traffic noise impacts so the sections for each of them have also been updated. The analysis of all other issues were not included because there were no substantive updates. The following information is presented relative to each environmental issue that was updated:

- Description of the existing setting as it relates to the specific environmental issue;
- A summary of policies and regulations relevant to the specific environmental issue;
- Identification of the thresholds of significance;
- Evaluation of project-specific impacts and a determination of significance based on identified threshold levels;
- Description of design features of the Specific Plan that will help reduce potential impacts;
- Identification of mitigation measures;
- A determination of the level of significance after mitigation measures are implemented

Because the cumulative impact analysis has been ordered to be updated by the Superior Court, all updated cumulative impact analysis is addressed in Chapter 6.0 of these Revised Sections of the FEIR.

NOTE TO READERS: The cumulative portion of Section 4.1 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.1 of the Revised Sections of the FEIR. All other portions of Section 4.1 of the 2015 FEIR remain unchanged. The absence of reference to a portion of Section 4.1 means that the corresponding portion of Section 4.1 in the FEIR remains unchanged or has been deleted.

4.1 AESTHETICS

NOTE TO READERS: The cumulative portion of Section 4.2 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.2 of this Revised Sections of the FEIR. This section has been updated to reflect the updated 2016 State of California, Riverside County Important Farmland Map. The absence of reference to a portion of Section 4.2 means that the corresponding portion of Section 4.2 in the FEIR remains unchanged or has been deleted.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

This section discusses possible agricultural and forestry resource impacts attributable to the World Logistics Center project. It describes existing agricultural resources and State farmland classifications for the project site. This section focuses on applicable State, regional, and local policies regarding agricultural resources and the conversion of farmland to non-agricultural uses.

The Superior Court ruling and writ of mandate require the following actions with regards to the analysis of Agricultural and Forestry Resources:

- *The FEIR and the resolution certifying the FEIR require clarification as to whether loss of locally important farmland will have a significant direct or cumulative impact on agriculture and, if significant, the FEIR must either explain how proposed mitigation will reduce the impact or why other mitigation is not feasible".*

At the time the Draft EIR was prepared, 25 acres of the project site were designated as "Unique Farmland" and 2,200 acres were designated as "Farmland of Local Importance by the state Department of Conservation. The Draft EIR found that the development of the World Logistics Center would convert the 25 acres of "Unique Farmland" to urban uses represented a significant impact to agricultural resources. Mitigation Measure 4.2.6.1 was applied to require an agricultural easement over comparable land, and therefore, reduce this impact to less than significant. In response to comments, the FEIR added analysis under the California Land Evaluation and Site Assessment (LESA) model (discussed further in Section 4.2.6.2 below) which demonstrated that potential impacts to Farmland of Local Importance would be less than significant. However, certain other text in the FEIR and in the City's resolution to certify the FEIR had not been updated and erroneously indicated that there was a significant impact resulting from the development of the Farmland of Local Importance. This revised Section 4.2 corrects these misstatements and replaces in its entirety Section 4.2 of the FEIR.

Since publication of the FEIR, the California Department of Conservation has published its "Riverside County Important Farmland 2016" map (published July 2017) which shows that the 25-acre parcel that had previously been designated as "Unique Farmland" has been re-designated as "Farmland of Local Importance." In addition, there were additional revisions to the Farmland designations on the project site. Based on the Farmland map published in July 2017, the 2,610-acre World Logistics Center site includes 2,361 acres of Farmland of Local Importance, 247.5 acres of Other Land, and 1.5 acres of Urban Built-up Land. With the change in designations for this parcel, the mitigation measure to reduce the impact from the loss of the onsite area designated as Unique Farmland is no longer applicable, since there is no longer any "Unique Farmland" in the development area of the World Logistics Center site. As a result of the publication of the revised map, this Revised Sections of the FEIR has updated the exhibit and text to reflect the most current designations.

The following text and figure from the FEIR has been revised to address the issues discussed above. The analysis contained in this section is based on the following reference documents:

- *Agricultural Mitigation Bank Memorandum*, County of Riverside Transportation and Land Management Agency, October 2, 2003.
- *Agricultural Resources Assessment for the World Logistics Center Specific Plan Draft Environmental Impact Report*, Parsons Brinckerhoff, original dated February 12, 2012, revised December 2013.

- *California LESA Model*, Agribusiness, Natural Resources & Energy Practice Group of Cushman & Wakefield Western, Inc. (C&WW). December 20, 2013.
- *A Guide to the Farmland Mapping and Monitoring Program*, California Department of Conservation, Division of Land Resources Protection, 2004 Edition.
- *California Land Evaluation and Site Assessment Model, Instruction Manual*, California Department of Conservation, Office of Land Conservation, 1997.
- *Conservation Element, City of Moreno Valley General Plan*, adopted July 11, 2006.
- Google Maps Street View, imagery dated 2007.
- Moreno Valley General Plan Land Use Map, November, 2017
- *Moreno Valley General Plan Environmental Impact Report*, SCH#200091075, certified July 2006.
- *Moreno Valley Municipal Code*, Chapter 9.06, current through February 2012.
- Riverside County Integrated Project website, http://www.rcip.org/, accessed April 5, 2012.
- *Riverside County Land Use Conversions, 1998–2000, 2000–2002, 2002–2004, 2004–2006,* California Department of Conservation, Division of Land Resources Protection.
- *Riverside County 2010 Agricultural Production Report*, Riverside County Farm Bureau, 2010.
- *Soil Survey Western Riverside County Area California*, United States Department of Agriculture, November 1971.
- *An Agriculture Industry Analysis of the Inland Empire*, Andrew Chang & Company, LLC. March 12, 2012 (DEIR Appendix C).
- California Department of Conservation's "Riverside County Important Farmland 2016" map (published July 2017).
- *Habitat Assessment, MSHCP Consistency, and HANS Report*, MBA, original dated December 20, 2012, revised September 2014 and May 2018. (This includes the focused surveys included as separate documents in the previous version.)

The California Land Evaluation and Site Assessment (LESA) Model worksheets prepared for the project are included in Appendix C to this Revised Sections of the FEIR (*Agricultural Resources Assessment for the World Logistics Center Specific Plan Draft Environmental Impact Report*, Parsons Brinckerhoff, original dated February 2012, revised September 2014).

4.2.1 Existing Setting

Most of the land within the project area has been utilized for agricultural purposes since the late 1880s. The area has a history of citrus production and dryland farming incorporating various agricultural activities such as frequent disking, infrequent pesticide application, and very limited irrigation. Due to a variety of local and regional economic factors, agricultural production is no longer a principal characteristic of the Moreno Valley economy.[1]

Based on the updated project habitat assessment (ESA, 2018) and the review of recent aerial photographs, approximately 2,200 acres or 84 percent of the 2,610-acre Specific Plan area is currently dry farmed, mainly with winter wheat. The remaining acreage of the Specific Plan area contains rural residential uses and disturbed native vegetation.

The farming activity on the WLC area has been conducted for the past several years under contract to a single contractor, Bruno Farms. The landowner, Highland Fairview, has made the land available for

[1] Conservation Element, City of Moreno Valley General Plan.

agricultural use at no cost, as the agricultural activities provide a valuable property maintenance function (fuel modification). Based on conversations with the contractor, agricultural production on the World Logistics Center site has been largely unsuccessful. For example, during the last seven years (the period for which statistics are available), only one year (2017) produced a harvestable crop. That year, rainfall levels in the area were extraordinarily high. In six of the past seven years, no crops were harvested at all. The contractor indicates that the lack of productivity of the past seven-year period is typical for the entire period he has been farming the WLC property. Despite the lack of productivity, the contractor continues to farm the property simply to continue his family's long history in agriculture. Table 4.2-1 includes the results of each year's production.

Table 4.2-1: Agricultural Production at World Logistics Center Site

Year	Rainfall (Wet/Dry)	Planted (Acres)	Crop	Harvested (Bushels)
2012	Dry	2,200	Wheat	0
2013	Dry	2,200	Wheat	0
2014	Dry	2,200	Wheat	0
2015	Dry	2,200	Wheat	0
2016	Dry	2,200	Wheat	0
2017	Wet	2,200	Wheat	79,992
2018	Dry	2,200	Wheat	0
Total Production from 2012 to 2018 (7 Years)				79,992
Average Annual Production for 2,200 acres				11,427
Average Annual Production per Acre				5.19

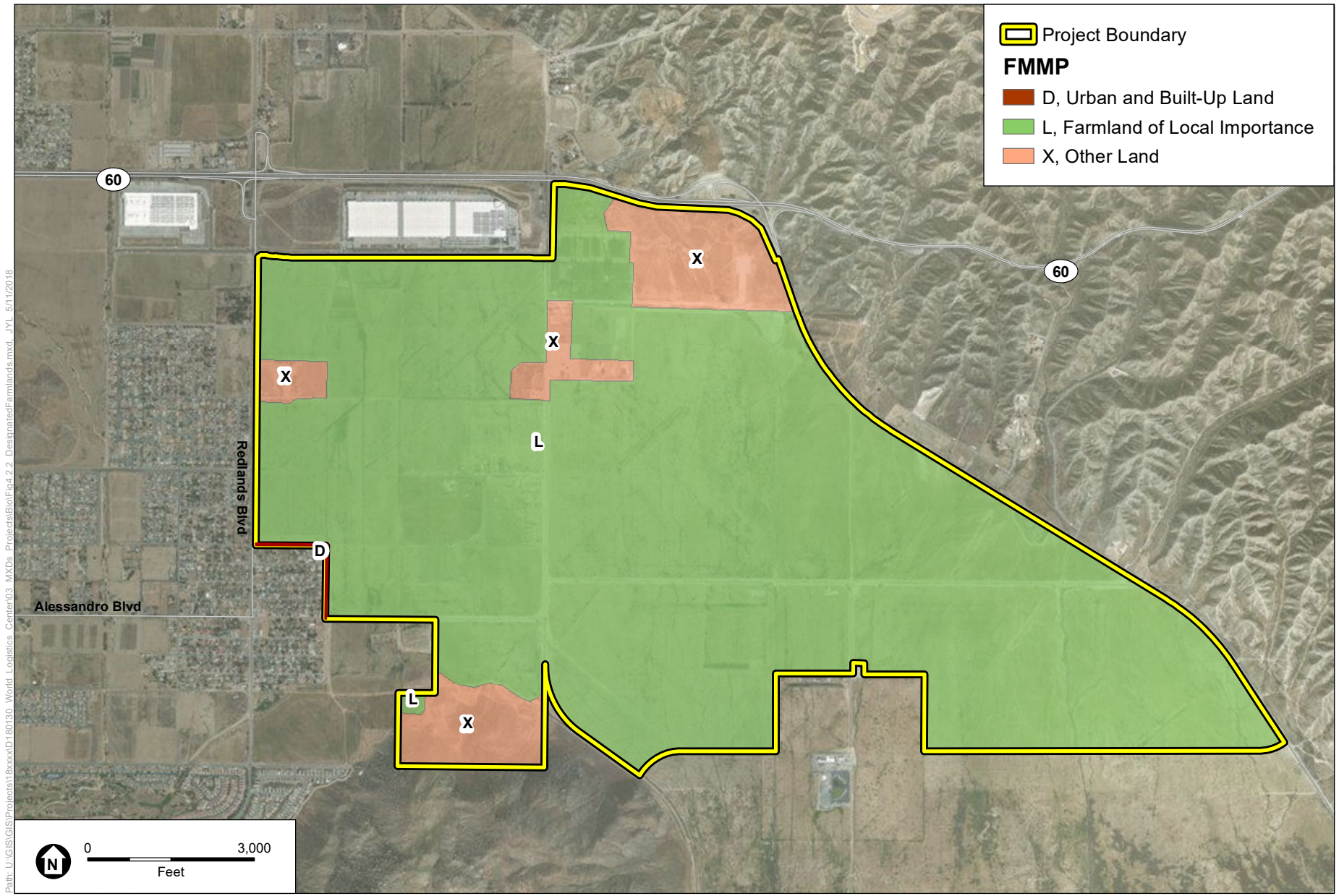
Source: Highland Fairview and Bruno Farms, 2018.

4.2.1.1 State Designated Farmland

The California Government Code (Section 65570) requires the collection and reporting of agricultural land use acreage by June 30 of each even-numbered year. Utilizing data from the U.S. Department of Agriculture, Natural Resource Conservation Service (USDA, NRCS) soil survey and current land use information, the Farmland Mapping and Monitoring Program (FMMP)[1] within the California Department of Conservation (DOC), compiles important farmland maps for each county within the State. Maps and statistics are produced biannually using a process that integrates aerial photo interpretation, field mapping, a computerized mapping system, and public review. These maps delineate land use in eight mapping categories (and one overlay category) and represent an inventory of agricultural soil resources within each county. The map for Western Riverside County is provided in Figure 4.2-1. The categories of land shown on these maps are listed below.

- **Prime Farmland:** Land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.
- **Farmland of Statewide Importance:** Land that is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store moisture.

[1] A Guide to the Farmland Mapping and Monitoring Program, California Department of Conservation, Division of Land Resources Protection, 2004 Edition.



SOURCE: ESRI 2016; FMMP 2016; Highland Fairview 2018

World Logistics Center

Figure 4.2-1

State Designated Farmlands

ESA

- **Unique Farmland:** Land of lesser-quality soils used to produce specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. It is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of Unique Farmland crops include oranges, olives, avocados, rice, grapes, and cut flowers.
- **Farmland of Local Importance:** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and local advisory committees, i.e., dairies, dry land farming, aquaculture, and uncultivated areas with soils qualifying for Prime Farmland and Farmland of Statewide Importance.

  Farmland of Local Importance in Riverside County, including the City of Moreno Valley, is defined as:

  - Lands with soils that would be classified as Prime Farmland and Farmland of Statewide Importance but lack available irrigation water.
  - Lands planted with dry land crops of barley, oats, and wheat.
  - Lands producing major crops for Riverside County but that are not listed as Unique crops. These crops are identified as returning one million or more dollars on the 1980 Riverside County Agriculture Crop Report. Crops identified are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelons.
  - Dairylands, including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture, or hayland of 10 acres or more.
  - Lands identified by city or county ordinance as Agricultural Zones or Contracts, which includes Riverside City "Proposition R" lands.
  - Lands planted with jojoba, which are under cultivation and are of producing age.

- **Grazing Land:** Land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.

- **Urban and Built-up Land:** Land used for residential, industrial, commercial, construction, institutional, and public administrative purposes such as railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities also are included in this category.

- **Other Land:** Land not included in any of the other mapping categories. Common examples include low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres.

- **Water:** Water areas with an extent of at least 40 acres.

- **Land Committed to Nonagricultural Use:** This optional designation is an overlay to the standard farmland categories and represents existing farmland and grazing land and vacant areas that have a permanent commitment for development. Examples of Land Committed to Nonagricultural Use would include an area undergoing permanent infrastructure installation or for which bonds or assessments have been issued for public utilities. Such lands represent planning areas where there are commitments for future nonagricultural developments that are not reversible by a simple majority vote by a city council or board of supervisors.

Figure 4.2-1 details farmland designations on the project area. Approximately 2,361 acres, or 90 percent of the 2,610-acre project site, are designated as Farmland of Local Importance. Approximately 247.5 acres located in several areas of the project area are designated X (Other Land) with the largest acreages in the northeast corner, southwest, and south central portions of the project area. Approximately 1.5 acres are designated Urban Built-up Land in the southwest portion of the project site. In addition,104 acres of offsite area required for infrastructure improvements are designated as X (Other Land).

4.2.1.2 California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, also referred to as the Williamson Act, is a non-mandated State program administered by counties and cities for the preservation of agricultural land. This program enables local governments to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open space use. In return, landowners receive much lower property tax assessments than normal because the assessments are based upon farming and open space uses rather than full market value.

Participation in the program is voluntary on the part of both landowners and local governments, and it is implemented through the establishment of Agricultural Preserves and the execution of Williamson Act contracts. Individual property owners enter into a contract that restricts or prohibits development of their property to non-agricultural uses during the term of the contract in return for lower property taxes. Initially signed for a minimum ten-year period, the contracts are automatically renewed each year for a successive minimum ten-year period unless a notice of non-renewal is filed, or a contract cancellation is approved by the local government.

The nearest parcel that is under Williamson Act contract is approximately 1.5 miles to the southeast of the project site just west of Gilman Springs Road. This property is outside of Moreno Valley city limits but within the city's sphere of influence. There are no Williamson Act Conservation contracts[1] within the project area.

4.2.1.3 General Plan, Specific Plan, and Zoning Designations

General Plan. The City's 2006 General Plan Land Use Element (Land Use Map, updated November, 2017) has no "agricultural" land use designation.[2] The EIR accompanying the City's 2006 General Plan determined that the conversion of agricultural land to nonagricultural uses represented a significant cumulative impact. In accordance with Section 15152 of the CEQA Guidelines, "agencies are encouraged to tier the environmental analysis which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for discussion at each level of environmental review." This Revised Sections of the FEIR is being tiered with the City's 2006 General Plan EIR. The City's 2006 General Plan EIR identified that as the transition from agricultural to urban and suburban uses continues, the extent to which agriculture and supporting economic activities contribute to the economic base of the City is reduced. In its adoption of the 2006 General Plan, the City recognized that these losses were offset by the economic activities and social benefits that typically accompany urban development. In connection with the City's conclusion that a significant cumulative impact would result from implementation of the General Plan, the City adopted Findings of Fact and a Statement of Overriding Considerations indicating that social and economic factors outweighed the significant cumulative impacts associated with conversion of agricultural land to non-agricultural use.

[1] Department of Conservation, FMMP, 2008.

[2] City of Moreno Valley General Plan, adopted July 2006. Available at: http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/ieir/eir-tot.pdf

The General Plan designation for the project site is Business Park/Light Industrial. The zoning for the project site is World Logistics Center Specific Plan – Logistics Development and World Logistics Center Specific Plan – Light Logistics. The development of the project site is regulated by the World Logistics Center Specific Plan.

4.2.2 Existing Policies and Regulations

4.2.2.1 City of Moreno Valley General Plan Policies

Neither, the City of Moreno Valley's General Plan nor it's zoning designates any land for agricultural production or preservation, but growing crops is permitted in all of the City's zoning categories. Where practical, the City encourages incorporation of crops, such as existing tree groves, into the design of proposed development projects allowing continuation of the agricultural character of the area as well as providing a buffer between different types of land uses.

The following City General Plan goals and policies are applicable to the World Logistics Center project.

9.1 Ultimate Goals

VIII. Recognize the need to conserve natural resources while accommodating growth and development.

9.4.2 Parks, Recreation, and Open Space Element Objectives and Policies

Objective 4.1 Retain agricultural open space as long as agricultural activities can be economically conducted, and are desired by agricultural interests, and provide for an orderly transition of agricultural lands to other urban and rural uses.

4.2.3 Thresholds of Significance

Appendix G of the *CEQA Guidelines* recognizes the following significance thresholds related to agricultural resources. Based on these significance thresholds, potential impacts to agricultural resources could be considered significant if the proposed project would:

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);
- Result in the loss of forest land or conversion of forest land to non-forest use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use; and/or
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use.

4.2.4 Methodology

The methodological analysis underlying this section of this Revised Sections of the FEIR consists of the following:

- First, analyze the FMMP data to determine if portions of the 2,610-acre project site and 104-acre offsite improvement area are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

- Second, evaluate the current General Plan land use designations, and zoning applicable to the site to determine the existence of any conflicts between the project and any potential existing agricultural General Plan and zoning designations applicable to the site.
- Finally, use the California Land Evaluation and Site Assessment (LESA) model, developed by the State Department of Conservation, as a guide to quantify any potential impacts the project may have on agricultural resources. Utilization of the LESA model is currently considered to be the most reliable method by which to determine a project's potential impacts on agricultural resources.

In the late 1980s and the early 1990s, the Department of Conservation (DOC) and the State Legislature began exploring ways by which local agencies could analyze the specific impacts of local projects related to the conversion of farmland in a manner that was consistent throughout the State. At that time, reference to the FMMP maps was the only widely utilized methodological approach to analyzing conversion impacts. Oftentimes, the FMMP maps were outdated and/or did not contain specific data on local conditions that could better assess whether local land contains viable farmland. Federal and State agencies were and are cognizant of the fact that determining the true significance of agricultural conversions is a function of understanding the specific characteristics affecting a particular site proposed for conversion. In order to create a more site-specific methodological approach to assessing agricultural impacts, following the preparation of several State and Federal studies, the DOC developed the LESA model as an optional method by which local agencies could assess the impacts of land conversion on agricultural resources. (See, e.g., Stats. 1993, Ch. 812; Pub. Res. Code § 21095; California Agricultural Land Evaluation and Site Assessment Model, Instruction Manual, 1987.) Because of its use of localized input factors, the LESA model is generally recognized as the preferred methodological tool to assess the significance of a project's impacts on agricultural resources.

4.2.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level. In either instance, no mitigation would be required.

4.2.5.1 Forest Land Zoning

Threshold	Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

According to the California Department of Forestry and Fire Protection, there are no areas designated as forest land or timberland on the project site. Therefore, no significant impacts would occur from the implementation of the project.

4.2.5.2 Loss or Conversion of Forest Land

Threshold	Would the project result in the loss of forest land or conversion of forest land to non-forest use?

There are no areas of forest lands on the project site. Therefore, no significant impacts would occur from the implementation of the project.

4.2.5.3 Existing Zoning and Williamson Act

Threshold	Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

While some portions of the 2,610-acre project site are currently used for agriculture, there are no Williamson Act contracts (see previously referenced Figure 4.2-1) on either the project site or any adjacent properties. Because the project would not conflict with any Williamson Act contracts, there would be no impacts related to this issue and no mitigation is required.

There are no agricultural zones identified on the 2,610-acre project site or on any of the surrounding properties.[1] However, agriculture is allowed in most areas of the City as an interim land use until it is replaced by development. The project site is not zoned for agricultural uses, so implementation of the World Logistics Center project would not conflict with an agricultural zone. Existing agriculture use is a permitted use in all areas of the proposed Specific Plan. In the absence of a significant impact, no mitigation is required.

General Plan Consistency. The following evaluates the project in relation to the City's General Plan goals and objectives relative to agriculture:

9.1 Ultimate Goals

Goal VIII. Recognize the need to conserve natural resources while accommodating growth and development.

Consistency: With mitigation outlined in Section 4.1, *Aesthetics*, the Specific Plan will allow for preservation of the most prominent existing visual resources in this portion of the City, but will result in the removal of agricultural fields to support the proposed development of logistics warehousing. Therefore, the project is consistent with this goal and no mitigation is needed.

9.4.2 Parks, Recreation, and Open Space Element Objectives and Policies

Objective 4.1 Retain agricultural open space as long as agricultural activities can be economically conducted, and are desired by agricultural interests, and provide for an orderly transition of agricultural lands to other urban and rural uses.

Consistency: The project will eventually result in the loss of agricultural land within the Specific Plan area; however, Section 12.5 of the Specific Plan contains a "right to farm" provision that will allow farming to continue within the WLCSP until such time as it converts to developed uses. This provision will help protect onsite farming from "nuisance" claims by new landowners or tenants (e.g., dust and noise). Therefore, the World Logistics Center project is consistent with this objective and no mitigation is needed.

4.2.5.4 Farmland Conversion

Impact 4.2.5.4: *Construction of the proposed project would not convert any Prime Farmland, Unique Farmland or Farmland of Statewide Importance as identified by the State of California to non-agricultural uses.*

Threshold	Would the project result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural land use?

[1] *Land Use Map, Land Use Designations,* City of Moreno Valley General Plan, July 2006, last updated November, 2017

While portions of the project site is currently used for agriculture, there is no land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the 2,610-acre project or in the 104-acre off-site improvement area. Because the project would not convert any onsite or off-site land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, the project's impacts related to this issue would be less than significant, and no mitigation is required.

Project or Specific Plan Design Features. Section 12.5 of the Specific Plan contains a "right to farm" provision that will allow farming to continue within the WLCSP until such time as it converts to developed uses. This provision will help protect onsite farming from "nuisance" claims by new landowners or tenants (e.g., dust and noise).

Mitigation Measures. Since there is no impact to Prime Farmland, Farmland of Statewide Importance or Unique Farmland, no mitigation measures are required.

4.2.6.2 Conversion of Farmland to Non-Agricultural Uses

Impact 4.2.5.5: *The project would convert approximately 2,200 acres of land currently being farmed and approximately 2,361 acres that are designated as Farmland of Local Importance, to non-agricultural uses.*

Threshold	Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?

In addition to the FMMP designations, Riverside County has established a program through which it classifies various land within the County as Locally Important Farmland. The state uses the County's determination to identify Farmland of Local Importance for its FMMP designations.

The factors used by Riverside County to define Locally Important Farmland are provided in Section 4.2.1.1 above.

The LESA Model. The California LESA Model was developed to provide lead agencies with an optional methodology to ensure that potentially significant effects on the environment from agricultural land conversions are quantitatively and consistently considered in the environmental review process (Public Resources Code Section 21095), including in California Environmental Quality Act (CEQA) reviews. The California Agricultural LESA Model evaluates measures of soil resource quality, a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, the factors are rated, weighted, and combined, resulting in a single numeric score. The project score becomes the basis for making a determination of a project's potential significance.

The conversion of agricultural land to non-agricultural uses is a result of various economic and demographic factors. Increased costs for water and a continuing demand for housing and commercial development in the City and region have provided the primary impetus for this agricultural land conversion. Appendix G of the *CEQA Guidelines* states as follows: "In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation (DOC) as an optional model to use in assessing impacts on agriculture and farmland."[1]

- The LESA model is intended to provide lead agencies with a methodology to identify potentially significant impacts that may result from agricultural land conversions. The model is a method of rating the relative quality of land resources and potential impacts to agricultural resources.

[1] *California Land Evaluation and Site Assessment Model*, Instruction Manual, State of California Department of Conservation, Office of Land Conservation, 1997.

- The LESA Model uses six different factors (two based on soil resource quality and four based on on-site and adjacent land characteristics) to develop a weighted score that identifies the significance of potential impacts to agricultural resources. The Land Evaluation (LE) scoring utilizes two soil factors. The Land Capability Classification (LCC) indicates the suitability of soils for most kinds of crops and the risk of damage when they are used in agriculture, while the Storie Index provides a numeric rating (0–100) of the relative degree of suitability or value of a given soil for intensive agriculture. The Site Assessment (SA) scoring considers the size of the site to be converted, water supply restrictions in drought and non-drought years, and the presence (or absence) of adjacent agricultural, habitat, or parkland uses.
- By assessing and weighing a variety of soil, water, and land use characteristics, it is possible that the conversion of a large parcel containing poor soils and with limited access to water would not result in a significant impact, while the conversion of a much smaller well-watered parcel with quality soils could be considered significant. To ensure potential impacts to adjacent agricultural activities are appropriately considered, the LESA model requires an examination of land use on all parcels within a Zone of Influence (ZOI) that extends a minimum 0.25 mile from the boundary of the site. For any site evaluated using the LESA model, the factors are rated, weighed, and combined, resulting in a single numeric score that becomes the basis for determining a project's potential significance.[1]

WLC Project Assessment

To assess potential agricultural resource impacts that may result from development of the World Logistics Center site, the LESA model was run by Parsons Brinkerhoff (PB) for the 2,610-acre project area. The total LESA score for the project is 60.4, which is considered significant unless either LE and SA are less than 20 (see Table 4.2-1). The LE sub-score is 40.9 and the SA sub-score is 19.5, indicating a less than significant impact and therefore does not require mitigation. The worksheets detailing the variables considered during the evaluation of each site are included in the *Agricultural Resources Assessment for the World Logistics Center Specific Plan* (DEIR Appendix C).

An independent analysis was conducted on the potential agricultural resource impacts that may result from development of the World Logistics Center site, the LESA model was run by Agribusiness, Natural Resources & Energy Practice Group of Cushman & Wakefield Western, Inc. (C&WW) for the 2,610-acre project area. The total LESA score for the project is 58.9, which is considered significant only if the LE and SA sub-scores are each greater than 20 (see Table 4.2-2). The LE sub-score is 40.9 and the SA sub-score is 18.0, indicating a less than significant impact and therefore does not require mitigation. The worksheets detailing the variables considered during the evaluation of each site are included in the *Agricultural Resources Assessment for the World Logistics Center Specific Plan* (DEIR Appendix C).

Table 4.2-2: LESA Model Significance Determination

Total LESA Score	Scoring Decision
0–39 Points	Not considered significant
40–59 Points	Considered significant *only* if LE and SA sub-scores are each *greater* than or equal to 20 points
60–79 Points	Considered significant *unless* either LE or SA sub-score is *less* than 20 points
80–100 Points	Considered significant

Source: California Land Evaluation and Site Assessment Model, Instruction Manual, State of California Department of Conservation, Office of Land Conservation, 1997.

[1] *California Land Evaluation and Site Assessment Model*, Instruction Manual, State of California Department of Conservation, Office of Land Conservation, 1997. Zoning map last updated November, 2017.

The majority of the World Logistics Center project site is currently designated as Farmland of Local Importance by the state's FMMP as determined by the County. The County's maps do not reflect the City's General Plan Land Use Map, which shows no agricultural designations in the City.

Implementation of the project would result in the permanent conversion of approximately 2,200 acres currently used for dry farming to non-agricultural uses, and would result in the permanent conversion of approximately 2,361 acres of land designated as Farmland of Local Importance. While this could have an effect on accelerating the loss of other existing agricultural land, portions of the state-owned lands to the south likely will continue in agricultural production. Likewise, there is no other agricultural use in the Zone of Influence (term used in the State LESA Model) and a majority of the land in that zone is vacant (i.e., in the Badlands to the east and portions of the San Jacinto Wildlife Area and the Lake Perris State Recreation Area to the south). The conversion of agricultural lands to urban uses is supported by the City's General Plan policies, as discussed above. The entire project site and adjacent lands have been designated for urban uses for nearly 20 years by the City, and the area designated Farmland of Local Importance within the Specific Plan area will be permanently converted to non-agricultural urban uses. Therefore, project implementation will result in less than significant impacts to conversion of Farmland of Local Importance (see previously referenced Figure 4.2-1). No mitigation is required.

Project or Specific Plan Design Features. There are no features included in the Specific Plan that address the loss of agriculture on the project site.

Mitigation Measures. No mitigation measures are required.

Level of Significance after Mitigation. Less than significant impact.

NOTE TO READERS: This portion of the Revised Sections of the FEIR replaces portions of Section 4.3 of the FEIR, except for subsections 4.3.1, 4.3.1.1 and 4.3.1.2 which remain unchanged... The cumulative portion of Section 4.3 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.3 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.3 means that the corresponding portion of Section 4.3 in the FEIR remains unchanged or has been deleted.

4.3 AIR QUALITY

Although not required by the Judge's ruling, portions of the Traffic and Circulation analysis have been revised to: (1) Show the effect of using the trip generation rates shown in the most recent edition of the Institute of Traffic Engineer's Trip Generation Manual; and (2) Show the effect of the inclusion of the over 360 projects that cumulatively contribute to traffic impacts. As a result, Section 4.3 Air Quality, Section 6.3 Air Quality Cumulative, along with Appendix A, Air Quality, Greenhouse Gas, and Health Risk Assessment Report, have also been revised to show the effect of incorporating the applicable data from the revised traffic analysis.

This section analyzes the World Logistics Center project's potential air quality impacts and provides a discussion of the World Logistics Center project, the physical setting of the project area, and the air quality regulatory framework. The air quality analyses evaluate potential air quality impacts by examining the short-term construction as well as long-term operational impacts associated with the project and by evaluating the effectiveness of the identified mitigation measures. Modeled air quality levels are based upon vehicle data, project trip generation, and vehicle miles traveled assumptions included in the project's *Traffic Impact Analysis (TIA)* and peak turn volumes generated for the World Logistics Center project combined with emission factors from the California Air Resources Board (CARB). The evaluation was prepared in accordance with appropriate standards, utilizing procedures and methodologies as recommended by the South Coast Air Quality Management District (SCAQMD), the California Office of Environmental Health Hazards Assessment (OEHHA), and CARB. Air quality data posted by the SCAQMD, CARB, and the EPA web sites are included to document the local air quality environment and are incorporated herein by reference.

Compared to the FEIR, construction emissions analyzed herein assume later construction years and therefore newer, more efficient equipment. This results in reduced construction emissions. As reflected in the TIA, use of the most recent edition of the Institute of Traffic Engineer's Trip General Manual results in fewer average daily trips than previously analyzed in the FEIR. A lower trip rate coupled with a lower regional vehicle miles traveled assumption analyzed in the TIA and the later operational year assumption results in reduced mobile emissions when compared to those in the FEIR. Additionally, the later operational year results in the inclusion of a greater number of electric vehicles in the operational assumptions. Due to these factors, the construction and operational analyses contained herein entirely replace the analyses included in the FEIR and no further comparison is required.

The analysis contained in this section is based on the following technical studies prepared for the World Logistics Center project:

- *Air Quality, Greenhouse Gas, and Health Risk Assessment Report* (ESA Associates, dated June 2018) contained in Appendix A of this Revised Sections of the FEIR; and
- *Traffic Impact Analysis Report, The World Logistics Center,* (WSP USA, Inc., dated June 2018) contained in Appendix L of this Revised Sections of the FEIR.

4.3.1.1 Regional Air Quality Improvements

The American Lung Association website (lung.org) includes data collected from State air quality monitors that are used to compile an annual *State of the Air* report. These reports have been published over the last 13 years. The latest *State of the Air Report* compiled for the Basin was in 2017 (American Lung Association, 2017). As noted in this report, air quality in the Basin has significantly improved in

terms of both pollution levels and high pollution days over the past three decades. Riverside County's average number of unhealthy ozone days dropped from 203 days per year in the initial 2000 State of the Air report to 122 in the 2017 report and San Bernardino County's number of unhealthy ozone days dropped from 230 in 2000 to 142 in 2017. Both Counties has seen dramatic reduction in particle pollution since the initial State of the Air report (2000). While the 2017 *State of the Air Report* shows a slight uptick in the number of days of unhealthy particle pollution for both counties since the 2016 report, it is important to note that pollution levels measured in this latter report were affected by fluctuations in weather conditions.

The 2016 Air Quality Management Plan (SCAQMD, 2017) outlines a comprehensive control strategy that meets the requirement for expeditious progress towards an attainment date for the five National Ambient Air Quality Standards (NAAQS) being analyzed. As stated in the 2016 AQMP, "The ozone and PM levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements" (SCAQMD, 2017). NO_X, VOC, PM, NH_3, have been decreasing in the Basin since 2000 and are projected to continue to decrease through 2035 (CARB, 2013). These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled in the Basin continue to increase, NO_X and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_X emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. The number of days exceeding the ozone national 8-hour standard has decreased between 1992 and 2011. During the 1992 time period, nearly all of the South Coast Air Basin had more than 50 exceedance days, with more than 100 days in nearly one-third of the Basin. This is equivalent to more than three months during a year with ozone concentrations above the level of the standard. Much of this area currently meets the national standard, including about two-thirds of Orange County and one-third of Los Angeles County, where the majority of the Basin population lives and works (CARB, 2013).

The reduction in air pollution levels experienced in the Basin is attributable to multiple factors. First, Federal and State regulatory strategies requiring the use of cleaner fuels and use of emissions control technology in the transportation and energy production industries have proven to greatly reduce the amount of tailpipe emission (vehicles) and point source (power plants) pollutants (e.g., NO_X and ROG). Second, the SCAQMD's rules and regulatory programs have proven to be instrumental in improving the air quality in the Basin. As an example, the SCAQMD has adopted multiple rules regarding fugitive dust (PM_{10} and $PM_{2.5}$) and construction emissions that have resulted in reduced emission levels. Third, the SCAQMD's creation of the 1993 CEQA review handbook has resulted in lead agencies throughout the air basin employing uniform CEQA analyses and methodologies. The use of uniform CEQA review has allowed the SCAQMD and lead agencies that rely on the 1993 SCAQMD Air Quality Handbook to perform CEQA analysis to better track progress and to employ uniform mitigation and design feature strategies. Fourth, the use of the SCAQMD thresholds of significance to determine a project's direct and cumulative impact has allowed the SCAQMD to make tremendous progress toward achieving air quality attainment. The discussion above (pertaining to the air quality improvements achieved over the past 20 years) demonstrates that the SCAQMD's rules and procedures, including the uniform utilization of the thresholds of significance recommended in the SCAQMD *CEQA Air Quality Handbook* are contributing toward the achievement of improved air quality in the Basin.

4.3.1.2 Local Air Quality

The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station most representative of the project site is the Riverside-Rubidoux station. This station monitors CO, SO_2, NO_2, O_3, PM_{10}, and $PM_{2.5}$. Some monitoring data for SO_2 has been omitted as attainment is regularly met for this pollutant within the Basin. This station characterizes the air quality representative of the ambient air quality in the project area. The ambient air quality data in Table 4.3-3 identify that CO and NO_2 levels are consistently below the relevant State and Federal standards in the project vicinity. O_3, PM_{10}, and $PM_{2.5}$ levels all exceed State and/or Federal standards regularly. Figure 4.3-1 identifies the location of the monitoring station relative to the World Logistics Center project site.

Table 4.3-1: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm(40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	53 ppb (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	None	
Sulfur Dioxide (SO_2)[11]	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (for certain areas)[11]	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)	—	
Lead[12, 13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average[11]	—		0.15 µg/m^3		
Visibility-Reducing Particles[14]	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: CARB, 2016a

Footnotes

1 California standards for ozone; carbon monoxide (except 8-hour Lake Tahoe); sulfur dioxide (1- and 24-hour); nitrogen dioxide; particulate matter (PM_{10} and $PM_{2.5}$ and visibility-reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest eight-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8 On October 1, 2015, the natural eight-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10 To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum concentrations at each site must not exceed 0.100 ppm. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 0.75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm).

12 The CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

°C = degrees Celsius
EPA = United States Environmental Protection Agency
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million
ppb = parts per billion

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Table 4.3-2: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	N/A
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Maintenance – serious (San Bernardino County is in nonattainment)
$PM_{2.5}$	Nonattainment	Moderate Nonattainment
CO	Attainment	Serious Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Pb	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Unclassified designation: a pollutant that is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
Attainment designation: a pollutant is designated attainment if the State standard for that pollutant was not violated at any site in the area during a 3-year period.
Nonattainment: a pollutant is designated nonattainment if there was at least one violation at any site in the area during a 3-year period.
Source: CARB, 2017a. USEPA, 2018a

4.3.1.3 Sensitive Land Uses in the Project Vicinity

Sensitive receptors include residences, schools, medical offices, convalescent facilities, and similar uses where people sensitive to air pollutants may be located (i.e., the ill, elderly, pregnant women, and children). There are currently six occupied single-family homes and associated ranch/farm buildings in various locations on the World Logistics Center project site. These residences are existing on-site sensitive receptors. The nearest off-site existing sensitive receptors in the vicinity of the project site are the residences located along Bay Avenue, Merwin Street, west of Redlands Boulevard, and scattered residences along Gilman Springs Road north of Alessandro Boulevard. Nearby sensitive land uses are depicted in Figure 4.3-2.

4.3.1.4 Existing Project Area Emissions

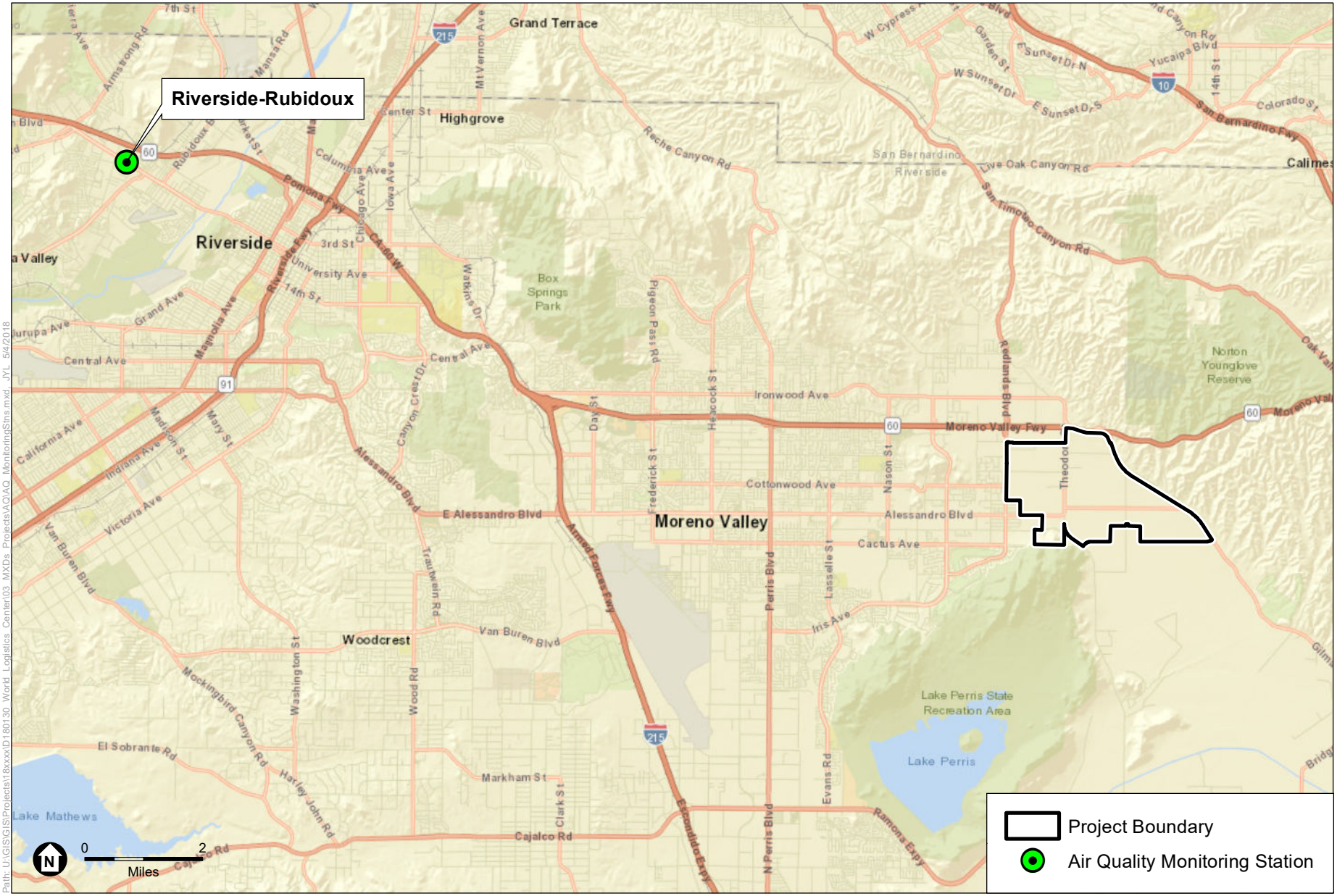
The project area is largely vacant undeveloped marginal agricultural land, with six occupied single-family homes and associated ranch/farm buildings in various locations on the property. Much of the site is currently used for dry farming. San Diego Gas & Electric (SDG&E) operates a natural gas compressor plant, known as the Moreno Compressor Station, on 19 acres south of the site. The Southern California Gas Company (SCGC) also operates a metering and pipe cleaning station on two separate parcels (totaling 1.5 acres) south of the site south of Alessandro Boulevard along existing Virginia Street. Existing air quality conditions at the project site reflect ambient[1] monitored conditions as presented in Table 4.3-3.

[1] Ambient: of or related to the immediate surroundings of something; in this context it means “in the air”

Table 4.3-3: Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard	2014	2015	2016	2017
Carbon Monoxide (CO)					
Maximum 1-hr concentration (ppm)		2.4	2.5	1.6	2.4
Number of days exceeded:	State: > 20 ppm	0	0	0	0
	Federal: > 35 ppm	0	0	0	0
Maximum 8-hr concentration (ppm)		1.9	1.7	1.3	1.8
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0	0
	Federal: ≥ 9 ppm	0	0	0	0
Ozone (O_3)					
Maximum 1-hr concentration (ppm)		0.141	0.132	0.142	0.145
Number of days exceeded:	State: > 0.09 ppm	29	31	33	ND
Maximum 8-hr concentration (ppm)		0.105	0.106	0.105	0.118
Number of days exceeded:	State: > 0.070 ppm	69	59	71	ND
	Federal: > 0.075 ppm	41	39	47	84
Coarse Particulates (PM_{10})					
Maximum 24-hr concentration (µg/m^3)		100	69	84	92
Number of days exceeded:	State: > 50 µg/m^3	125	92	ND	ND
	Federal: > 150 µg/m^3	0	0	0	0
Annual arithmetic mean concentration (µg/m^3)		44.8	40.0	ND	ND
Exceeded for the year	State: > 20 µg/m^3	Yes	Yes	ND	ND
Fine Particulates ($PM_{2.5}$)					
Maximum 24-hr concentration (µg/m^3)		50.6	61.1	60.8	50.3
Number of days exceeded:	Federal: > 35 µg/m^3	ND	10	5	ND
Annual arithmetic mean (µg/m^3)		16.8	15.3	12.6	12.2
	State: > 12 µg/m^3	Yes	Yes	Yes	Yes
Exceeded for the year	Federal: > 12.0 µg/m^3	Yes	Yes	Yes	Yes
Nitrogen Dioxide (NO_2)					
Maximum 1-hr concentration (ppm)		0.0600	0.057	0.073	0.063
Number of days exceeded:	State: > 0.18 ppm	0	0	0	0
Annual arithmetic mean concentration (ppm)		0.015	0.0144	0.015	0.015
	State: > 0.030 ppm	No	No		
Exceeded for the year	Federal: > 0.053 ppm	No	No	ND	ND
Sulfur Dioxide (SO_2)					
Maximum 24-hr concentration (ppm)		1.3	1.0	1.2	1.2
Number of days exceeded:	State: > 0.04 ppm	ND	ND	ND	ND
Annual arithmetic average concentration (ppm)		0.26	0.27	0.23	0.29
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No	No

µg/m^3 = micrograms per cubic meter
EPA = United States Environmental Protection Agency
ID = Insufficient data
ND = No data
ppm = parts per million
Source: CARB, 2018 for the SCAQMD Riverside-Rubidoux air monitoring station.

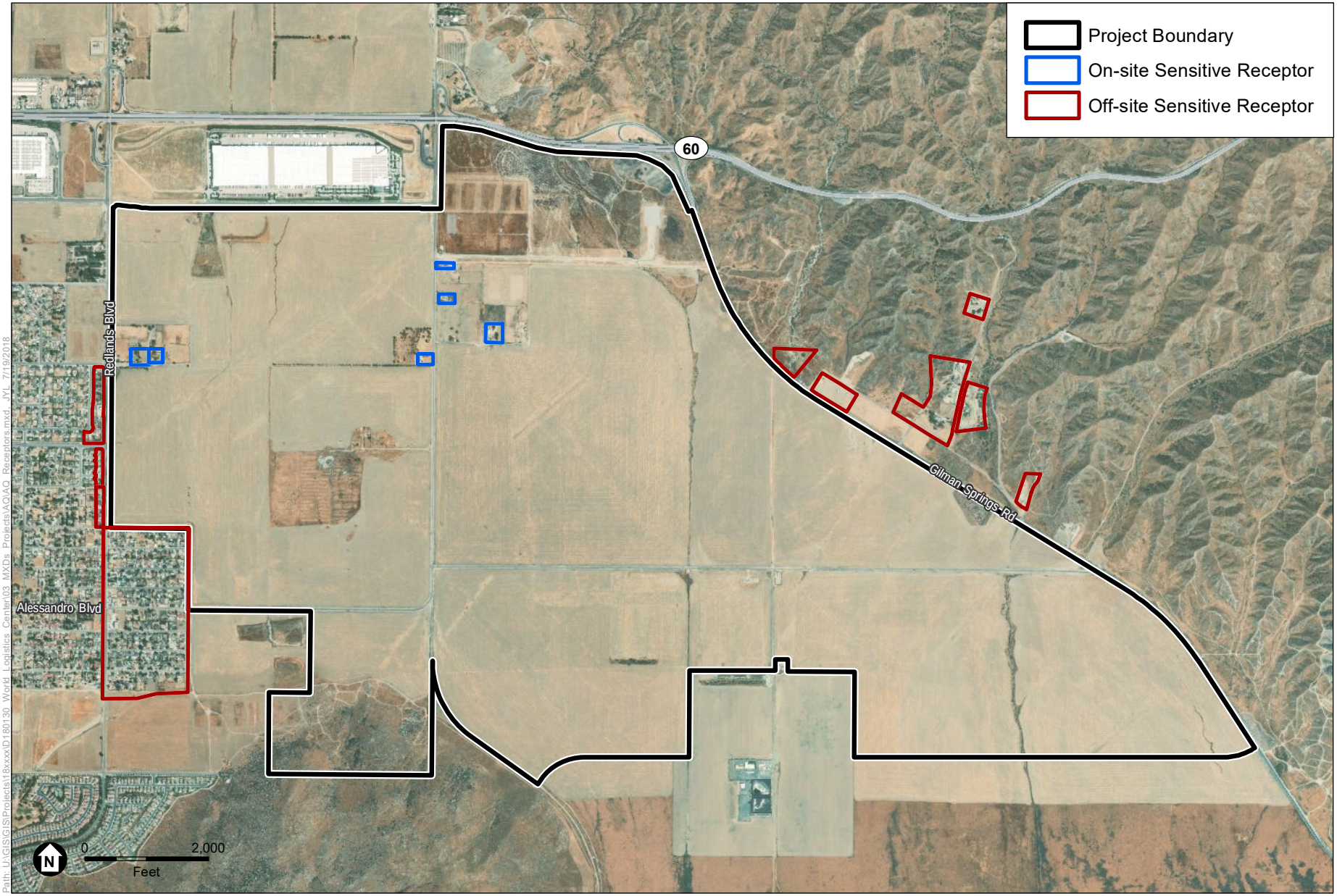


SOURCE: ESRI

World Logistics Center

Figure 4.3-1
SCAQMD Monitoring Stations

ESA



SOURCE: ESRI 2016; County of Riverside 2017

World Logistics Center

Figure 4.3-2

Sensitive Receptors in the Project Vicinity

ESA

4.3.2 Policies and Regulations

4.3.2.1 Federal Regulations

Clean Air Act. Pursuant to the Federal Clean Air Act (CAA) of 1970, the EPA established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

Effective June 2, 2010, the EPA revised the primary standard for SO_2 by establishing a new 1-hour standard at a level of 75 ppb. The EPA revoked the two existing primary standards of 140 ppb evaluated over 24 hours and 30 ppb evaluated over an entire year as they would not provide additional public health protection given a 1-hour standard at 75 ppb. To attain this standard, the 3-year average of the 99^{th} percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

Effective December 14, 2012, the national annual $PM_{2.5}$ standard was lowered from 15 $\mu g/m^3$ to 12 $\mu g/m^3$ but the existing 24-hour and annual secondary standards were retained.

On October 1, 2015, the national eight-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm, respectively.

4.3.2.2 Regional Regulations

Regional Air Quality Management Plan (AQMP). The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP, which has a 20-year horizon for the Basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the Federal and/or California ambient air quality standards. The SCAQMD and SCAG must update the AQMP every three years.

2012 AQMP. The 2012 AQMP was adopted December 7, 2012 (SCAQMD, 2012b). The purpose of the 2012 AQMP for the Basin was to set forth a program that would lead the Basin into compliance with the Federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update of the Basin's projections in meeting the Federal 8-hour ozone standards. The AQMP was adopted by the SCAQMD Board; therefore, it was submitted to the EPA as the State Implementation Plan (SIP). Specifically, the AQMP served as the official SIP submittal for the Federal 2006 24-hour $PM_{2.5}$ standard. In addition, the AQMP updated specific elements of the previously approved 8-hour ozone SIP: 1) an updated emissions inventory, and 2) new control measures and commitments for emissions reductions to help fulfill the Section 182(e)(5) portion of the 8-hour ozone SIP.

The 2012 AQMP states, "The remarkable historical improvement in air quality since the 1970's is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs."

The 2012 AQMP proposed Basin-wide $PM_{2.5}$ measures that would be implemented by the 2014 attainment date, episodic control measures to achieve air quality improvements (would only apply during high $PM_{2.5}$ days), Section 182(e)(5) implementation measures (to maintain progress toward meeting the 2023 8-hour ozone national standard), and transportation control measures. Most of the control measures focused on incentives, outreach, and education.

Proposed $PM_{2.5}$ reduction measures in the 2012 AQMP included the following:

- Further NO_X reductions from the SCAQMD's Regional Clean Air Incentives Market (RECLAIM) program. The RECLAIM program was adopted by the SCAQMD in October 1993 and set an emissions cap and declining balance for many of the largest facilities emitting NO_x and SO_x in the South Coast Air Basin. RECLAIM includes over 350 participants in its NO_x market and about 40 participants in its SO_x market. RECLAIM has the longest history and practical experience of any locally designed and implemented air emissions cap and trade program. RECLAIM allows participating facilities to trade air pollution while meeting clean air goals.
- Further reductions from residential wood-burning devices.
- Further reductions from open burning.
- Emission reductions from under-fired char broilers.
- Further ammonia reductions from livestock waste.
- Backstop measures for indirect sources of emissions from ports and port-related sources.
- Further criteria pollutant reductions from education, outreach, and incentives.

There were multiple VOC and NO_X reductions in the 2012 AQMP to attempt to reduce ozone formation, including further VOC reductions from architectural coatings, miscellaneous coatings, adhesives, solvents, lubricants, and mold release products.

The 2012 AQMP also contained proposed mobile source implementation measures for the deployment of zero and near-zero emission on-road heavy-duty vehicles, locomotives, and cargo handling equipment. There were measures for the deployment of cleaner commercial harbor craft, cleaner ocean-going marine vessels, cleaner off-road equipment, and cleaner aircraft engines.

The 2012 AQMP proposed the following mobile source implementation measures:

- On-road mobile sources:
  - Accelerated penetration of partial zero-emission and zero-emission vehicles. This measure proposed to continue incentives for the purchase of zero-emission vehicles and hybrid vehicles with a portion of their operation in an all-electric range mode. The state Clean Vehicle Rebate Pilot program was proposed to continue from 2015 to 2023 with a proposed funding for up to $5,000 per vehicle. The measure seeks to provide funding assistance for up to 1,000 zero-emission or partial-zero emission vehicles per year.
  - Accelerated penetration of partial zero-emission and zero-emission light-heavy and medium-heavy duty vehicles through funding assistance for purchasing the vehicles. The objective of the proposed action was to accelerate the introduction of advanced hybrid and zero-emission technologies for Class 4 through 6 heavy-duty vehicles. The state is currently implementing a Hybrid Vehicle Incentives Project program to promote zero-emission and hybrid heavy-duty vehicles. The proposed measure aims to continue the program from 2015 to 2023 to deploy up to 1,000 zero- and partial-zero emission vehicles per year with up to $25,000 funding assistance per vehicle. Zero-emission vehicles and hybrid vehicles with a portion of their operation in an all-electric range mode would be given the highest priority.
  - Accelerated retirement of older light-, medium-, and heavy-duty vehicles through funding incentives.
  - Further emission reductions from heavy-duty vehicles serving near-dock rail yards This proposed control measure called for a requirement that any cargo container moved between the ports of Los Angeles and Long Beach to the nearby rail yards be with zero-emission technologies. The measure would be fully implemented by 2020 through the deployment of zero-emission trucks or any alternative zero-emission container movement system such as a

fixed guideway system. The measure called for the CARB to either adopt a new regulation or amend an existing regulation to require such deployment by 2020.

- Off-road mobile sources:
  - Extension of the Surplus Off-Road Opt-In for NO_x (SOON) provision for construction/industrial equipment, which provides funding to repower or replace older Tier 0 and Tier 1 equipment.
  - Further emission reductions from freight and passenger locomotives called for an accelerated use of Tier 4 locomotives in the Basin.
  - Further emission reductions from ocean-going marine vessels while at berth.
  - Emission reductions from ocean-going marine vessels.

The 2012 AQMP also relied upon the SCAG regional transportation strategy, which is in its adopted 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2011 Federal Transportation Improvement Program (FTIP), which contains the following sections:

1. Linking regional transportation planning to air quality planning and making sure that the regional transportation plan supports the goals and objectives of the AQMP/SIP.
2. Regional transportation strategy and transportation control measures: The RTP/SCS contains improvements to the regional multimodal transportation system including the following: active transportation (non-motorized transportation, e.g., biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance.
3. Reasonably available control measure analysis.

2016 AQMP. On March 3, 2017, SCAQMD approved the Final 2016 Air Quality Management Plan (2016 AQMP) that demonstrates attainment of the 1-hr and 8-hr ozone NAAQS as well as the latest 24-hr and annual $PM_{2.5}$ standards. Currently, the 2016 AQMP is being reviewed by the U.S. EPA and CARB. Until the approval of the EPA and CARB, the current regional air quality plan is the Final 2012 Air Quality Management Plan (AQMP) adopted by the SCAQMD on December 7, 2012.The Final 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS.

The 2016 AQMP seeks to achieve multiple goals in partnership with other entities promoting reductions in criteria pollutant, greenhouse gases, and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of our nearly 17 million residents, including those in disproportionally impacted and environmental justice communities that are concentrated along our transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to our air quality challenges. For that reason, the SCAQMD worked closely with CARB and the U.S. EPA who have primary responsibility for these sources. The Plan recognized the critical importance of working with other agencies to develop new regulations, as well as secure funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. These “win-win” scenarios will be key to implementation of this Plan with broad support from a wide range of stakeholders. The 2016 AQMP also includes transportation control measures (TCMs) developed by SCAG from the 2016 RTP/SCS.

The RTP/SCS and FTIP were developed in consultation with federal, state and local transportation and air quality planning agencies and other stakeholders. The four County Transportation Commissions (CTCs) in the South Coast Air Basin, namely Los Angeles County Metropolitan Transportation Authority, Riverside County Transportation Commission, Orange County Transportation Authority and the San Bernardino Associated Governments, were actively involved in the development of the regional transportation measures. In the South Coast Air Basin, TCMs include the following three main categories of transportation improvement projects and programs that have funding programmed for right-of-way and/or construction in the first two years of the 2015 FTIP:

- Transit, Intermodal Transfer, and Active Transportation Measures;
- High Occupancy Vehicle (HOV) Lanes, High Occupancy Toll (HOT) Lanes, and their pricing alternatives; and
- Information-based Transportation Strategies.

Diesel Regulations. The Ports of Long Beach and Los Angeles and the CARB have adopted regulations aimed at reducing the amount of diesel particulate. These programs are the Ports of Los Angeles and Long Beach "Clean Truck Program" (POLA, 2018), the CARB Drayage Truck Regulation (CARB, 2017b), and the CARB statewide On-road Truck and Bus Regulation (CARB, 2017c). Each of these regulatory programs will require an accelerated introduction of "clean trucks" into the statewide truck fleet that will result in substantially lower diesel emissions during the 2008 to 2020 timeframe. Additionally, the Ports of Long Beach and Los Angeles updated the Clean Air Action Plan in 2017, providing new strategies and emission targets supporting zero-emissions and freight efficiency targets (POLA and POLB, 2017).

Toxic Air Contaminants. A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality (death) or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. Hazardous Air Pollutants (HAPs) and TACs are used interchangeably in this discussion. HAPs are regulated by the EPA under the Federal Clean Air Act. TAC is the term used under the California Clean Air Act to regulate the same hazardous pollutants. These contaminants tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for periods of several years. Many of these contaminants originate from human activities, such as fuel combustion and solvent use.

In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants carbon dioxide, nitrogen dioxide, particulate matter, and ozone for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards. For this reason, thresholds for TAC impacts for regulatory purposes and for CEQA thresholds have been set based on the increase in risk of cancer of a specific amount at sensitive receptors located near the source of TAC emissions.

The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are as follows: acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, paradichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM).

TAC measurements, available at the SCAQMD Riverside Rubidoux monitoring station (14 miles northwest of the project site) can be used to characterize the "background" health risks from regional TAC emission sources. Table 4.3-4 provides this summary of TAC levels in the project area and health risk information. This table lists the air concentration levels and associated health cancer risks for eight of the nine TACs reported by the CARB in its Almanac as measured at the Riverside-Rubidoux air monitoring

station. Note that since diesel PM cannot be measured directly, the table does not provide estimates of either measured diesel PM or the cancer risk associated with diesel PM.

Past studies have indicated that diesel PM poses the greatest health risk among the TACs listed in Table 4.3-4. The principal concern regarding exposures to diesel PM lies in its small size and thus its ability to penetrate deep into lung tissues when inhaled. Diesel exhaust has been found to cause health effects from short-term or acute exposures and from long-term chronic exposures, such as repeated occupational exposures. The type and severity of health effects depends upon several factors including the amount of chemical you are exposed to and the length of time you are exposed. Individuals also react differently to different levels of exposure. There is limited information on exposure to just diesel PM but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects.

Long-term (chronic) exposure to diesel exhaust is likely to occur when a person works in a field where diesel is used regularly or experiences repeated exposure to diesel fumes over a long period of time. Human health studies demonstrate a correlation between exposure to diesel exhaust and increased lung cancer rates in occupational settings. Experimental animal inhalation studies of chronic exposure to diesel exhaust have shown that a range of doses causes varying levels of inflammation and cellular changes in the lungs. Human and laboratory studies have also provided considerable evidence that diesel exhaust is a likely carcinogen.

Several occupational and ambient studies have documented the health effects due to exposure to diesel PM. The California Office of Environmental Health Hazards Assessment (OEHHA), in its role in assessing risk from environmental factors reviews such studies and makes recommendations on the way environmental risk should be evaluated through programs like the AB2588 Hot Spot Program. In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, 1950's era railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. However, all of these studies were based on exposure to exhaust from traditional diesel engines and prior to the advent of highly efficient emissions controls like the diesel particulate filter. Based on these studies, CARB identified diesel exhaust a toxic air contaminant in 1998.

In 2014, the SCAQMD released the fourth iteration of the Multiple Air Toxics Exposure Study (MATES-IV). The MATES-IV is a follow up to the previous MATES studies and included an updated toxics air emission inventory, new air toxics air dispersion modeling, and enhanced air toxics monitoring. A key conclusion reached in the MATES-IV study was that the population weighted cancer risk in the Basin decreased by 57 percent from the MATES-III period in 2005 to the MATES-IV period in 2012 indicating that overall, cancer risks are declining in the Basin as a result of the implementation of emission controls principally on large diesel trucks. The MATES-IV study also concluded that diesel PM contributed 68 percent to the total cancer risk in the Basin with benzene and 1.3 Butadiene also making important contributions to cancer risk.

Table 4.3-4: Toxic Air Contaminant Concentration Levels and Associated Health Effects (Riverside, California)

TAC	Concentration[A] / Health Risk[B]	2015	2016	2017	Health Effects
Acetaldehyde	Mean	1.48	1.44	1.08	Acetaldehyde is a carcinogen that also causes chronic non-cancer toxicity in the respiratory system. Symptoms of chronic intoxication of acetaldehyde in humans resemble those of alcoholism. The primary acute effect of inhalation exposure to acetaldehyde is irritation of the eyes, skin, and respiratory tract in humans. At higher exposure levels, erythema, coughing, pulmonary edema, and necrosis may also occur. Acute inhalation of acetaldehyde resulted in a depressed respiratory rate and elevated blood pressure in experimental animals.
	Health Risk	22	21	16	
Benzene	Mean	ID	0.27	0.271	Benzene is highly carcinogenic and occurs throughout California. Benzene also has non-cancer health effects. Brief inhalation exposure to high concentrations can cause central nervous system depression. Acute effects include central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness. Neurological symptoms of inhalation exposure to benzene include drowsiness, dizziness, headaches, and unconsciousness in humans. Ingestion of large amounts of benzene may result in vomiting, dizziness, and convulsions in humans. Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract in humans. Redness and blisters may result from dermal exposure to benzene. Chronic inhalation of certain levels of benzene causes disorders in the blood in humans. Benzene specifically affects bone marrow (the tissues that produce blood cells). Aplastic anemia, excessive bleeding, and damage to the immune system (by changes in blood levels of antibodies and loss of white blood cells) may develop. Increased incidence of leukemia (cancer of the tissues that form white blood cells) has been observed in humans occupationally exposed to benzene.
	Health Risk	ID	85	70	
Chromium Hex	Mean	0.083	0.045	ID	In California, hexavalent chromium has been identified as a carcinogen. There is epidemiological evidence that exposure to inhaled hexavalent chromium may result in lung cancer. The principal acute effects are renal toxicity, gastrointestinal hemorrhage, and intravascular hemolysis. The respiratory tract is the major target organ for chromium (VI) following inhalation exposure in humans. Other effects noted from acute inhalation exposure to very high concentrations of chromium (VI) include gastrointestinal and neurological effects, while dermal exposure causes skin burns in humans. Chronic inhalation exposure to chromium (VI) in humans results in effects on the respiratory tract, with perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, asthma, and nasal itching and soreness reported. Chronic human exposure to high levels of chromium (VI) by inhalation or oral exposure may produce effects on the liver, kidneys, gastrointestinal and immune systems, and possibly the blood.
	Health Risk	34	19	ID	

Table 4.3-4: Toxic Air Contaminant Concentration Levels and Associated Health Effects (Riverside, California)

TAC	Concentration[A] / Health Risk[B]	2015	2016	2017	Health Effects
Para-Dichlorobenzene	Mean	ID	ID	ID	In California, para-dichlorobenzene has been identified as a carcinogen. Acute exposure to 1,4-dichlorobenzene via inhalation results in irritation to the eyes, skin, and throat in humans. In addition, long-term inhalation exposure may affect the liver, skin, and central nervous system in humans (e.g., cerebellar ataxia, dysarthria, weakness in limbs, and hyporeflexia).
	Health Risk	ID	ID	ID	
Formaldehyde	Mean	3.52	3.64	3.35	The major toxic effects caused by acute formaldehyde exposure via inhalation are eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. Chronic exposure to formaldehyde by inhalation in humans has been associated with respiratory symptoms and eye, nose, and throat irritation. Animal studies have reported effects on the nasal respiratory epithelium and lesions in the respiratory system from chronic inhalation exposure to formaldehyde. Occupational studies have noted statistically significant associations between exposure to formaldehyde and increased incidence of lung and nasopharyngeal cancer. This evidence is considered "limited" rather than "sufficient" due to possible exposure to other agents that may have contributed to the excess cancers. EPA considers formaldehyde to be a probable human carcinogen (cancer-causing agent) and has ranked it in EPA's Group B1. In California, formaldehyde has been identified as a carcinogen.
	Health Risk	70	76	70	
Methylene Chloride	Mean	ID	48.2	12.3	Case studies of methylene chloride poisoning during paint-stripping operations have demonstrated that inhalation exposure to extremely high levels can be fatal to humans. Acute inhalation exposure to high levels of methylene chloride in humans has resulted in effects on the central nervous system, including decreased visual, auditory, and psychomotor functions, but these effects are reversible once exposure ceases. Methylene chloride also irritates the nose and throat at high concentrations. The major effects from chronic inhalation exposure to methylene chloride in humans are effects on the central nervous system, such as headaches, dizziness, nausea, and memory loss. In addition, chronic exposure can lead to bone marrow, hepatic, and renal toxicity. EPA considers methylene chloride to be a probable human carcinogen and has ranked it in EPA's Group B2. California considers methylene chloride to be carcinogenic.
	Health Risk	ID	477	122	
Perchloroethylene	Mean	ID	0.018	0.013	In California, perchloroethylene has been identified as a carcinogen. Perchloroethylene vapors are irritating to the eyes and respiratory tract. Following chronic exposure, workers have shown signs of liver toxicity, as well as kidney dysfunction and neurological disorders.
	Health Risk	ID	2	2	
Diesel PM	Mean	No Monitoring Data Available			In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provided strong evidence that long-term occupational exposure to diesel exhaust
	Health Risk				

Table 4.3-4: Toxic Air Contaminant Concentration Levels and Associated Health Effects (Riverside, California)

TAC	Concentration[A] / Health Risk[B]	2015	2016	2017	Health Effects
					increases the risk of lung cancer. Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. This research was based on studies prior to the advent of modern diesel engines with high efficiency emissions controls. Note: Since then the Health Effects Institute study clearly demonstrates that the application of new emissions control technology to diesel engines has virtually eliminated the health impacts of diesel exhaust.

ID = Insufficient data
A = Concentrations for Hexavalent Chromium are expressed as µg/m^3, and concentrations for Diesel PM are expressed as µg/m^3. Concentrations for all other TACs are expressed as ppb.
B = Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available
Source: CARB, 2018 for the SCAQMD Riverside-Rubidoux air monitoring station.

In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust has been a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Diesel PM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a diesel PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. Within the Basin, in addition to diesel PM, there are emissions of benzene, formaldehyde, acetaldehyde, naphthalene, ethylbenzene, acrolein, toluene, hexane, propylene, and xylene from a variety of sources located within the Basin that contribute to health risks.

In January 2015, a major new study evaluated the health impacts of "new technology diesel exhaust" (NTDE). Beginning in 2001, USEPA and CARB began issuing a series of regulations that require new diesel-powered vehicles and equipment to use the latest emissions control technology. This technology relies on two components. The first is a diesel particulate filter, which is capable of reducing particulate matter emissions by over 90% (required for new engines beginning in 2007). The second technology is selective catalytic reduction, which reduces emissions of nitrogen oxides by over 90% (required for new engines beginning in 2010). Diesel emissions from engines equipped with this technology is referred to as New Technology Diesel Exhaust (NTDE). As a result of the advances in emission control technology, USEPA, CARB, and other government and industry stakeholders commissioned a series of studies called the Advanced Collaborative Emissions Study (ACES). ACES has been guided by an ACES Steering Committee consisting of representatives of the Health Effects Institute (HEI) and the Coordinating Research Council (CRC: a nonprofit organization that directs engineering and environmental studies on the interaction between automotive or other mobility equipment and petroleum products), along with the U.S. Department of Energy, U.S. EPA, engine manufacturers, the petroleum industry, CARB, emission control manufacturers, the National Resources Defense Council, and others. The HEI, funded in part by USEPA, was selected to oversee Phase 3 of ACES.

Phase 3 of ACES evaluated whether emissions from new technology diesel engines cause cancer or other health effects. Specifically, it evaluated the health impacts of a 2007-compliant engine equipped with a diesel particulate filter. HEI found chronic exposure to NTDE did not induce tumors or pre-cancerous changes in the lung and did not increase tumors that were considered to be related to NTDE in any other tissue in laboratory rats. The study also confirmed that the concentrations of particulate matter and toxic air pollutants emitted from NTDE are more than 90% lower than emissions from traditional older diesel engine. Rats are the most sensitive laboratory animal species for evaluation of older technology diesel engines (pre-model year 2007), because of their sensitivity to high concentrations of particles (present in older technology diesel engines), compared with other species (including humans).

The HEI study clearly demonstrates that the application of new emissions control technology to diesel engines have virtually eliminated the health impacts of diesel exhaust (McDonald et al, 2015).

Conservative Nature of Health Risk Assessments. Moreover, the current methodological protocols required by the SCAQMD and CARB when studying the health risk posed by diesel PM assume the following (CAPCOA, 2009): (1) 24-hour constant exposure; (2) 350 days a year; (3) for a continuous period lasting 30 years. These are overly conservative assumptions that are not replicated in reality. Most people are indoors for 18–20 hours a day (at their place of employment or home) and most people do not live in the same location for a 30-year period. In fact, less than 10 percent of the population has

a continuous residency at the same location of greater than 30 years (American Community Survey, 2011). Thus, the health risk assessments prepared pursuant to the current protocols overestimate the risk of cancer associated with diesel PM exposure.

Alternate Views on Diesel PM Risk. Some researchers, such as Dr. James E. Enstrom (Enstrom, 2008), believe that the risk from diesel PM is exaggerated. Enstrom calls into question some of the basic research on the declaration of diesel exhaust as a toxic air contaminant. In particular, the article states the following:

> *There is substantial new epidemiologic evidence relevant to the health effects of diesel exhaust that was not considered when the 1998 toxic air contaminant declaration was made. For instance, the 2007 paper by Francine Laden et al. measured death rates during 1985–2000 among 54,000 members of the unionized U.S. trucking industry. … This cohort, which included 36,000 diesel truck drivers, had death rates from all causes and all cancer that were substantially below the rates among US males. Furthermore, unlike earlier evidence that was used in the TAC declaration, this cohort did not have a substantially elevated lung cancer death rate.*

Dr. Enstrom also indicates that the premature mortality calculation in the report, "Quantification of the Health Impacts and Economic Valuation of Air Pollution from Ports and Goods Movement in California," is exaggerated. Dr. Enstrom's analysis "found no relationship between $PM_{2.5}$ and mortality in elderly Californians during 1983–2002."

4.3.3 Methodology

The *Air Quality, Greenhouse Gas, and Health Risk Assessment Report* for this revised section of the FEIR (ESA Associates, 2018) evaluated the air quality impacts associated with the development of the World Logistics Center project including the following:

- Determined the short-term construction air quality and health risk impacts on both on-site and off-site sensitive receptors based on SCAQMD and OEHHA assessment methodologies and significance thresholds;
- Determined the long-term air quality and health risk impacts, including vehicular traffic, on both on-site and off-site sensitive uses based on SCAQMD and OEHHA assessment methodologies and significance thresholds; and
- Determined the required mitigation measures to reduce short-term and long-term on-site air quality and health risk impacts from all sources.

An Air Quality, Greenhouse Gas, and Health Risk Assessment Report was prepared by ESA Associates (ESA Associates, 2018) in June 2018, included as Appendix A of this Revised Sections of the FEIR, which estimated the impacts associated with the interim and horizon opening years. The methodology used in the analysis is discussed below.

4.3.3.1 Construction

Construction-related emissions are expected from various activities associated with the construction of the project such as rough grading, infrastructure construction, asphalt paving, building construction, architectural coatings, and construction workers commuting. Construction emissions for construction worker vehicles traveling to and from the project site, in addition to vendor trips (construction materials delivered to the project site) and haul trips (dump trucks and concrete trucks) were also accounted for in the analysis. Localized air quality in the project area would be affected by both heavy-duty construction equipment usage on site as well as local traffic due to the equipment delivery and construction worker commuting. The anticipated construction equipment and construction schedule are identified in Appendix A. The SCAQMD CEQA methodology (SCAQMD, 1993) was used to analyze the criteria pollutant emissions from these activities.

A summary of the construction assumptions is included below. For a detailed description of assumptions, please refer to Appendix A.

- *Version of CalEEMod*. The construction emissions were estimated utilizing the latest version of CalEEMod (version 2016.3.2), which uses mobile source emissions from EMFAC2014.
- *Construction Period.* Construction was assumed to occur over 16 years from the year 2020 to 2035.[2] Although buildout of the project would depend on market conditions, the project could be built out as early as 2035. Therefore, to provide a conservative air quality analysis, construction was assumed to be completed over a 16-year period that provides for phase overlap and the use of less efficient construction equipment.
- *Building Phasing.* Building construction activity was subdivided into the following sub-phases: building-concrete; building-wet utilities; building-electrical; and building-landscaping to accurately describe construction activities.
- *Mass Grading Duration.* Each planning area was assumed to be graded separately over a total of approximately 58 months to reflect a realistic grading plan.
- *On-Site On-road Vehicle Emissions.* On-site travel and idling emissions from concrete trucks, haul trucks, service/support trucks, and delivery trucks were included in this analysis.
- *Equipment for Grading.* The construction equipment and haul truck deliveries for the mass excavation and fine grading phases vary per planning area (since there are varying sizes of each planning area).
- *Onsite Equipment Fleet for Non-Grading Phases.* The peak number of equipment was based on the size of each planning area and duration of construction.
- *Onsite Equipment Hours per Day.* The analysis assumed that the onsite equipment would be in the on position for 10 hours per day as a project design feature. This is a conservative scenario as the CalEEMod default assumes construction equipment would be on for 6 to 8 hours per day. This was used to calculate maximum daily emissions which are required for the regional analysis, because project emissions can occur on any day of the week.

  Concrete pouring would likely occur during nighttime hours due to limitations high temperatures pose for concrete work during the day. On-site equipment used during concrete pouring would involve daytime prep with actual concrete pouring occurring during the nighttime hours. On average, the total hours of operation for each piece of equipment during the concrete phase would be approximately 10 hours. Therefore, the analysis assumes a realistic average use of construction equipment by assuming that the maximum equipment would be used for five days per week occurring for 10 hours per day (including the concrete pouring phase). In this way, an annual average and daily emission inventories were estimated.

  - *Tier 4 Equipment.* The analysis assumed that for the mitigated emissions, all equipment over 50 horsepower would be Tier 4 as required by a revised mitigation measure.

4.3.3.2 Operation

Air quality in the project area would be affected by long-term air emissions from stationary sources and mobile sources related to the World Logistics Center project once it commences operations. The stationary source emissions would come from consumption of natural gas and emergency generators

[2] *Full build out of the Project is expected to take 15 to 20 years, dependent on market forces. The TIA analyzes full project buildout in 2040, which is worst case for traffic analysis purposes as it accounts for greater regional growth in non-project traffic. However, for purposes of a conservative construction impact analysis, the fifteen-year buildout (ending in 2035) is analyzed. An accelerated construction schedule occurring in earlier years would account for greater overlap of construction activity and the use of dirtier construction equipment (i.e. subject to less stringent emission standards).*

while mobile source emissions would come from vehicular emissions from automobiles and trucks traveling to, from, and within the project site and from on-site forklifts and yard trucks.

A key piece of information required to estimate the project's operational emissions deals with an estimate of the number of trips and types of vehicles (i.e., cars and trucks) generated by the project during a peak hour and on a daily basis. To determine mobile source emissions associated with the project, the trip generation rates were derived from the *Traffic Impact Analysis Report* (TIA) for the project prepared by WSP USA.

Working jointly with the National Association of Industrial and Office Properties (NAIOP), the SCAQMD conducted a trip generation study for high-cube warehouses, the predominant form of land use for the project, *High-Cube Warehouse Vehicle Trip Generation Analysis* (ITE, 2016). The study replaces the earlier, smaller studies that produced conflicting results and created uncertainty regarding the amount of traffic generated by the newer, more automated type of high-cube warehouse proposed for the project. The results of the study for high-cube warehouse trip generation has been incorporated into the 10th edition of the Institute of Traffic Engineers (ITE) *Trip Generation Manual.* The trip generation rates included in this study for high-cube warehouse uses and trip rates from the 10th edition of the ITE *Trip Generation Manual* have been used for other proposed land uses.

For purposes of the TIA and worst case traffic growth assumptions, project operations were analyzed based on two buildout years: 2025 Phase 1 buildout year and 2040 full buildout year. Forecasted trip generation and vehicle miles traveled (VMT) contained in the TIA were used to estimate the project's motor vehicle emissions for the Phase 1 and full buildout scenarios. The traffic model provided estimates of project traffic volumes segregated by vehicle class as passenger cars, light heavy duty trucks, medium heavy duty trucks, and heavy-heavy duty trucks. The TIA provides VMT attributable to the project based on the net effect the project has on regional travel as well as project VMT without consideration of a net effect. The net effect includes consideration that creation of a job center (the project) would redistribute existing regional travel and result in shorter employee trips. Freeway and non-freeway VMT and speed data, as provided by WSP, were utilized to determine the appropriate emission factors to apply to project trips from the EMFAC2014 model. In calculating the operational traffic emissions, the VMT per speed was based on daily speed data provided by WSP. Emissions factors vary by speed bin. Therefore, accounting for variations in speed attributable to slow downs occurring during peak hours provides a realistic representation of project mobile emissions.

Mobile emissions utilized EMFAC2014's projected vehicle fuel mix for Phase 1 buildout year 2025 and project buildout year 2040. EMFAC2014 does not include population assumptions for electric or natural gas-fueled trucks. Section 6.17, *Energy*, of this EIR addresses the potential penetration of electric trucks and potential use in association with the project. Although the State has set targets for zero-emission vehicles, it would be speculative to assume that the High Penetration scenario discussed in Section 6.17 would be practicable or feasible by 2025 or by 2040. The Low, Medium, and High Penetration scenarios discussed in Section 6.17 are possible; however, as a worst-case analysis, the air quality analysis included herein did not take factor in any potential emissions reductions provided by electric or natural gas-fueled trucks.

Emission factors for the year 2018 were used for the "worst-case" scenario. Phase 1 of the project used emission factors from the year 2025, and Phase 2 of the project used emission factors for the year 2040. For the mitigated scenario, the emission factors were modified to reflect the mitigation measure that requires the use of model year 2010 or newer trucks for all diesel trucks associated with the project. Note that emissions from the existing on-site residence and fugitive dust that would be removed were not included in this analysis as a worst-case scenario.

4.3.3.3 Localized Construction/Operation

SCAQMD has developed the Localized Significance Threshold (LST) methodology that can be used to determine whether or not a project may generate significant adverse localized air quality impacts that substantially affect sensitive receptors. LSTs represent the maximum emissions from a project that will

not cause or contribute to an exceedance of the most stringent applicable Federal or State AAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area identified by the SCAQMD. SCAQMD's current guidelines, *Final Localized Significance Threshold Methodology* (SCAQMD, 2003) and subsequent additions, were adhered to in the assessment of local air quality impacts from the World Logistics Center project. The local emissions of concern from construction and operational activities as defined by the SCAQMD are NO_X, CO, PM_{10}, and $PM_{2.5}$ combustion emissions from construction equipment and fugitive PM_{10} dust from construction site preparation activities. A summary of assumptions for the localized assessment is included below. For detailed assumptions, refer to Appendix A.

- *Construction Schedule.* Construction was assumed to occur over 16 years from the year 2020 to 2035.[3] Although buildout of the project would depend on market conditions, the project could be built out as early as 2035. Therefore, to provide a conservative air quality analysis, construction was assumed to be completed over a 16-year period that provides for activity overlap and the use of older construction equipment.
- *Emission Source Configuration.* The analysis represented the off-road construction exhaust emission source as a series of contiguous volume sources, which is consistent with the SCAQMD methodology for LST assessments.
- *Operational Truck Idling.* Each truck was assumed to idle for 5 minutes per day consistent with the California Air Resources Board's Air Toxic Control Measure that limits such idling to 5 minutes and requirements specified in the World Logistics Center Specific Plan. Although project mitigation limits idling to 3 minutes per day per truck, this reduction in emissions has not been accounted for to provide a worst-case analysis.

The localized significance threshold analysis evaluated three conditions:

- Project Phase 1 (2018): this condition assumed that Phase 1 of the project is fully built out in 2018.
- Project Phase 1 and Phase 2 Full Build Out (2018): this condition assumes that Phase 1 and Phase 2 of the project are fully built out in 2018.
- Proposed Development Schedule: this condition examined the proposed development schedule of the two-phased project. Three analysis years were examined under this condition for potential localized air quality impacts:
    - 2025, the earliest year Phase 1 is assumed to be fully operational. When the projected construction schedule would result in construction activities in the southern portion of the project adjacent to Alessandro Boulevard and east of the existing residential areas along Merwin Street, and when all of Phase I operations would occur (approximately 57 percent of entire project floor space);
    - 2032, the year when the project emissions from both project construction and operation are at their highest combined levels for several pollutants; and when construction activities would occur adjacent to the existing residences along Gilman Springs Road (eastern portion of site); and

[3] *Full build out of the Project is expected to take 15 to 20 years, dependent on market forces. The TIA analyzes full project buildout in 2040, which is worst case for traffic analysis purposes as it accounts for greater regional growth in non-project traffic. However, for purposes of a conservative construction impact analysis, the fifteen-year buildout (ending in 2035) is analyzed. An accelerated construction schedule occurring in earlier years would account for greater overlap of construction activity and the use of dirtier construction equipment (i.e. subject to less stringent emission standards)*

- 2040[4] when the Phase 1 and Phase 2 of the project are fully operational.

Project Phase 1 (2018) represents an interim step during which Phase 1 of the project (approximately 57 percent of the total size of the project) is completely built out in 2018. This analysis simply looked at the situation of what would happen if Phase 1 of the project were built in its entirety with no reductions in motor vehicle emissions that would occur in the future as a result of emission control programs that have already been adopted. This assessment also provided consistency with the TIA and noise reports which examine the Project Phase 1 (2018) condition. The project impact results were compared to the existing air quality levels in 2018 and only consider the project's operational emissions and not construction emissions.

Project Phase 1 and 2 Full Build Out 2018 represents a worst-case scenario since the project could not be physically built out in its entirety in a single year and does not reflect the fact that the project would be developed over a time period of 16 years depending on market demands for warehouse space. This assumption also does not account for the fact that emissions from mobile sources, prior to mitigation, particularly from heavy duty diesel trucks are expected to decline significantly over time as emissions control technologies continue to improve. This assessment also provided consistency with the TIA and noise reports which examine the full Project Phase 1 and Phase 2 (2018) Build Out condition. The project impact results were compared to the existing air quality levels in 2018 and only consider the project's operational emissions and not construction emissions.

The Project Development condition represents the project development including the localized impacts during construction and operation over the time period of 2020 to 2040. These results were compared to the existing air quality levels in 2018.

4.3.3.4 Health Risk Assessment

A Health Risk Assessment (HRA) is a guide that helps to determine whether current or future exposures to a chemical or substance in the environment could affect the health of a population. In general, risk depends on the following factors:

- How much of a chemical is present in an environmental medium (e.g., air);
- How much contact (exposure) a person has with the contaminated environmental medium; and
- The inherent toxicity of the chemical.

The assessment of health impacts is a continuing evolution of science and regulation. Since December 2014, three major scientific and regulatory activities have come forward that will affect how such assessments are performed and what such impacts mean to society as described below.

On December 30, 2014, the ARB released its update to the Emissions Factor Model, EMFAC2014, which is used to estimate emissions from motor vehicles in California. The EFAC2014 model represents the ARB's current understanding of motor vehicle technologies and regulatory implementation of rules aimed at reducing air emissions from motor vehicles. Of significance in this regard are the new projections of air emissions from heavy duty diesel engines. Based on the results of the EMFAC2014 model, emissions of diesel particulate matter range from 50 to 80 percent lower than previously estimated using the previous version of the EMFAC model, EMFAC2011. Since heavy duty trucks constitute nearly all of the project's diesel PM emissions, the incorporation of the emission information

[4] *In some circumstances, references are made to the year 2035. The year 2035 is the year the construction schedule assumes full completion of project construction. Assuming earlier construction years would result in a more conservative analysis because the use of less efficient construction equipment is assumed. However, detailed traffic volumes were provided by the project traffic consultant for the long-term planning year 2040. For purposes of this assessment, the project buildout year is referred to as year 2040 to remain consistent with the TIA.*

from the EMFAC2014 model is important in estimating the amount of diesel PM and in assessing the project's health risk impacts resulting from these emissions

On January 27, 2015, the HEI, a joint private-government partnership, released a major peer-reviewed scientific report entitled *Effects of Lifetime Exposure to Inhaled New-Technology Diesel Exhaust in Rats* (McDonald et al, 2015). This is the first study to conduct a comprehensive evaluation of lifetime inhalation exposure to emissions from heavy-duty 2007-compliant engines (referred to as "new technology diesel exhaust," or NTDE). The study evaluated the long-term effects of multiple concentrations of inhaled NTDE, which has greatly reduced particle emissions compared with "traditional-technology diesel exhaust" (TDE) in male and female rats on more than 100 different biologic endpoints, including tumor development, and compared the results with biologic effects seen in earlier studies in rats after exposure to TDE. Lifetime inhalation exposure of rats exposed to one of three levels of NTDE from a 2007-compliant engine, for 16 hours per day, 5 days a week, with use of a strenuous operating cycle that more accurately reflected the real-world operation of a modern engine than cycles used in previous studies, did not induce tumors or pre-cancerous changes in the lung and did not increase tumors that were considered to be related to NTDE. The importance of this study is that diesel PM emissions from new technology diesel engines does not cause any increase in the risk of lung cancer or other significant adverse health effects in study animals that, in fact are more sensitive to toxics exposures than humans. While this study focused on heavy duty truck emissions, the new clean diesel technology has the potential for impacting all sectors, including passenger cars, agriculture, construction, maritime and transportation. Previous studies directed at studying the effects of diesel PM on health were based on exposure studies that date 15 to 20 years ago when diesel emissions were significantly higher than the NTDE. It is also important to highlight that the U.S. Environmental Protection Agency (EPA), the California Air Resources Board, the U.S. Department of Energy (DOE) and the U.S. Federal Highway Administration are sponsors and/or reviewers of this study in conjunction with the manufacturers of emissions control equipment.

On March 6, 2015, the OEHHA adopted a new guidance for estimating health risks from toxic air contaminants that incorporated the importance of early-in-life sensitivities of young children to exposures to toxics air contaminants and recommends a lifetime exposure duration of 30-years. Within the context of this assessment, this new assessment guidance is referred to as the "Current OEHHA Guidance". The new guidance updates earlier guidance recommended by OEHHA and SCAQMD referred to in this assessment as the "Former OEHHA Guidance", which was used in the Draft EIR. The "Former OEHHA Guidance" is based on a lifetime exposure of 70 years and does not incorporate early-in-life age sensitivity factors. The importance of the "Current OEHHA Guidance" is that the guidance produces much more conservative estimates of cancer risks from toxic air contaminant exposures than the "Former OEHHA Guidance".

The HRA has been conducted to allow decision makers to see the cancer-related impacts of the World Logistics Center project with the assumption that new technology diesel exhaust cause cancer, contrary to what was found by the HEI study. The following information summarizes the main assumptions utilized in preparation of the HRA. For more detailed discussion of assumptions and methodology, refer to Appendix A.

Traffic Volumes. The HRA used the construction and operational emission values as described above in the air quality study. Note that with respect to the operational emissions, since the project may change the traffic distribution in the region, net trips and associated net emissions on each project-impacted roadway segment was calculated using the difference between the trip rates for the 2018 (baseline year) with-project scenario and without-project scenario. The TIA studied three with-project and without-project scenarios, based on existing (year 2018), interim year 2025, and horizon year 2040; the HRA analysis is based on the 2018 traffic scenario because it has the highest certainty with regard to pre-project conditions than the 2025 and 2040 traffic scenarios (i.e., the pre-project traffic conditions for those future year traffic scenarios are speculative in nature). To be conservative, for segments that have net negative trips (i.e., where the project causes reduction in trip rates on some roadway segments due to traffic redistribution in the region), the HRA used a zero emission value instead of taking credit for the trip rate reductions.

Vehicle Speeds. In calculating the operational traffic emissions, the VMT per speed was based on daily speed data provided by the traffic consultant (WSP). Speed data accounts for variations in speed attributable to slow downs occurring during peak hours.

Organic Gas Emissions. The assessment of acute non-cancer hazards examined the impacts of the toxic components of the project's organic gas and PM emissions from construction equipment during project construction, and total organic gas and PM emissions from gasoline and diesel vehicles during project operation.

Calculated Cancer Population Burden. The health risk assessment included the computation of cancer population burden attributed to the project's diesel PM emissions.

Maximum Exposure Duration for Sensitive/Residential Receptors. The HRA used the SCAQMD recommended intake rate percentiles - RMP using the Derived Method, which applies to multi-pathway risk assessments in which two dominant exposure pathways use the high-end point-estimates of exposure. Furthermore, since cancer risk calculation is based on 30-year exposure duration, the HRA assumed exposure starts at the beginning of construction (Construction + Operation HRA). The revised HRA also analyzed the 30-year exposure scenario that assumed exposure starts at the beginning of full project operation (Operational HRA). The Operational HRA assumed that a receptor starts exposure at the beginning of the full project operational year of 2040 and exposure lasts for 30 years until 2069. The Operational HRA also conservatively used the 2040 emission rate for each of the 30 years of exposure.

Maximum Exposure Duration for Worker Receptors. The cancer risk impacts are presented in accordance with "Current OEHHA Guidance", which assumes an exposure duration of 25 years for worker receptors, which is based on labor statistics showing 95 percent of workers stay in the same job for 25 years or less.

School Receptors. The assessment of cancer risks at local school receptors was included based on "Current OEHHA Guidance".

The HRA methodology applied a risk characterization model to the results from an air dispersion model to estimate potential health risks at each sensitive receptor location. Because of the pervasive nature of diesel particulate matter (diesel PM) in contributing to estimated health risks in California, the focus of this assessment was on estimating the health risks from diesel PM. While the project activities may result in the emission of other TACs (e.g., Total Organic Gases (TOG) from diesel and gasoline-powered vehicles), diesel PM from the project was found to contribute approximately 98 percent of the total cancer risk from project operations (see the *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, Appendix A of the Revised FEIR). Reactive Organic Gases (ROG) and PM exhaust emissions from construction equipment and TOG and PM emissions from diesel and gasoline vehicles of project operation were, however, included in the assessment of acute non-cancer hazards.

The health risk calculation methodology in this HRA is consistent with *SCAQMD Health Risk Assessment Guidance* (SCAQMD, 2016) and the "Current OEHHA Guidance" set forth in the 2015 OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. The estimation of cancer risk involves the specification of several parameters including the concentration level of the toxic air contaminant (for purposes of this assessment diesel PM_{10} exhaust), the rate of inhalation of the toxic, the exposure frequency (number of days per year), the exposure duration in years, the time period over which the exposure takes place, what is termed a slope factor that represents an upper bound on the increased cancer risk from a lifetime exposure to a toxic by ingestion or inhalation and early-in-life age sensitivity factors. The values of these parameters depend on the type of receptor, i.e., sensitive/residential, worker, and student as discussed below.

Cancer Risk Exposure Assumptions. The principal focus of this HRA was on the potential health impacts to sensitive/residential receptors located within and surrounding the project site. Sensitive receptors include hospitals, schools, daycare facilities, elderly housing and convalescent facilities.

Residences are also considered sensitive receptors. An important parameter necessary to estimate cancer risk is the duration of exposure of an individual to toxic air contaminants. An assessment of population mobility can assist in determining the length of time a residential receptor is exposed in a particular location. For example, the duration of exposure to a source of toxic air contaminants will be directly related to the period of time residents live near the source of the emissions.

Table 4.3-5 summarizes the primary exposure assumptions used in this HRA to calculate individual cancer risk by receptor type, which is based on the SCAQMD HRA Guidance and the "Current OEHHA Guidance".

The underlying factors used in the analysis exemplify the conservative nature of utilizing the exposure scenarios and the underlying assumptions:

- The residential cancer risk calculation assumed that each resident will be exposed to diesel particulate matter (diesel PM) and organic gases for 24 hours a day for 350 days a year at the location of his or her home throughout the entire 30-year residential exposure period.
- The worker and student cancer risk calculations assumed that workers or students are exposed to diesel PM for 8 hours a day, next to, but outside of the buildings in which they work or study.
- The atmospheric dispersion model and traffic model that were used to estimate risks generally provide impact estimates that are over-estimated based on the use of conservative model assumptions.

Table 4.3-5: Exposure Assumptions for Cancer Risk

Type of Guidance	Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors	Time at Home Factor (%)	Daily Breathing Rate (L/kg-day)
		Hours/ day	Days/ year				
Current OEHHA Guidance	Sensitive/Residential:						
	3rd Trimester	24	350	0.25	10	85	361
	0-2 years	24	350	2	10	85	1090
	2-16 years	24	350	14	3	72	572
	Older than 16 years	24	350	14	1	73	261
	Student	8	180	9	3	NA	640
	Worker	8	250	25	1	NA	230

Time at home factor is 1 if there is a school receptor within the 1 in a million (or greater) cancer risk isopleth, which was the case for this project's unmitigated scenario for the Construction + Operation HRA.
(L/kg-day) = liters per kilogram body weight per day; NA = not applicable.
The daily breathing rates shown are RMP using the Derived Method for residential as recommended by the SCAQMD and the 95th percentile rate for other receptors as recommended by the OEHHA.
Source: OEHHA, 2015; SCAQMD, 2016.

Other Factors that Influence Health Risk Estimates: Conservative Trip Estimates. It should also be noted that the TIA used a conservative estimate of the number of truck trips after the project begins operation. The number of truck trips is important because diesel PM emissions are directly related to both the number of trucks and the vehicle miles traveled. As mentioned above, the TIA in the Revised Sections of the FEIR uses the traffic generation rate for high-cube warehouses from the 10th edition of the Institute of Traffic Engineers' (ITE) Trip Generation Manual which is based on the *High-Cube Warehouse Vehicle Trip Generation Analysis* prepared jointly by SCAQMD and National Association of Industrial and Office Properties (NAOIP).

Cancer Burden. Whereas cancer risk represents the probability that an individual will develop cancer, cancer burden multiplies the cancer risk by the exposed population to estimate the number of individuals that would be expected to contract cancer from the project. The exposed population is defined as the number of persons within a facility's zone of impact, which is typically the area exposed to an incremental cancer risk of one in a million from the project. Consistent with this definition, cancer

burden was calculated by first identifying all population census tracts[5] located within the project's zone of impact, multiplying the estimated incremental project cancer risk impact in the census tract by the population of the census tract and then summing all of products of population times estimated cancer risk in the zone of impact. Note that each census tract contributes to the cancer burden in proportion to its population and risk. For example, if a census tract has a relatively high estimated cancer risk, but no people living there, it will not contribute to the estimation of the cancer burden. In accordance with "Current OEHHA Guidance", the cancer burden was calculated assuming a 30-year exposure duration along with the appropriate exposure frequency, daily breathing rates, age sensitivity factors, and time at home factors appropriate to each age group (OEHHA, 2015). A cancer burden greater than 0.5 is considered a significant cancer burden.

Non-cancer Hazards. Separate from cancer risk impacts, exposures to TACs such as diesel PM can also cause chronic (long-term) and acute (short-term) related non-cancer illnesses such as reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system, birth defects, or other adverse environmental effects. Risk characterization for non-cancer health risks from TACs is expressed as a HI. The HI is a ratio of the predicted concentration of a project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). This is a separate and distinct analysis from the analysis conducted for cancer risk. A significant risk is defined by the SCAQMD as an HI of 1 or greater. The California OEHHA has assigned a chronic non-cancer REL of 5 $\mu g/m^3$ for diesel PM (OEHHA, 2015). Diesel PM has effects on the respiratory system, which accounts for essentially all of its potential chronic non-cancer hazards. Therefore, the only HI calculated was for the respiratory system.

Exposures to TACs can also have short-term or acute non-cancer effects, typically dealing with exposures over an hour or so. OEHHA has not defined a REL for diesel PM appropriate for estimating acute non-cancer hazards from diesel PM. Therefore, to estimate the potential acute non-cancer impacts from the project, it was necessary to examine the various individual chemical components (or chemical species) that comprise the emissions from both diesel vehicles and gasoline vehicles. For this purpose, use was made of emission source profiles that provide estimates of the various chemical components that comprise the exhaust from diesel and gasoline vehicles. From this information, an estimate was made of the maximum one-hour average concentration levels of the project's various chemical species from which an acute non-cancer HI can be determined.

Morbidity and Mortality. Respirable particulate matter is a public health concern as it is known to impact both the respiratory and cardiovascular systems. Respirable particulate matter deposition in the lungs and penetration into the bloodstream (for the smallest particles) triggers a range of inflammation responses and exacerbates health problems such as asthma and chronic bronchitis. Individuals susceptible to higher health risks from exposure to airborne particulate matter (PM_{10} and $PM_{2.5}$) include children, the elderly, smokers, and people of all ages with low pulmonary/ cardiovascular function. The CARB reviewed and summarized the toxic health effects (i.e., mortality and morbidity) of PM exposure and presented a health effect model attempting to quantify these impacts based on concentration-response functions (C-R functions) (CARB, 2008a). This CARB model has been used, for example, to estimate the number of cases of disease and premature deaths linked to PM and ozone exposure from ports and goods movement in California.

The CARB model has also been used to quantitatively assess project-specific incremental levels of public mortality and morbidity, however, such calculations are subject to significant uncertainty. Sources of uncertainty include emission estimates, population exposure estimates, concentration-response functions, baseline rates of mortality and morbidity that are entered into C-R functions, and occurrence of additional not-quantified adverse health effects. It should be noted that the nature of PM as a complex mixture of various pollutants, as well as the confounding health effects of pollutants such

[5] A census tract is a geographic region defined for the purpose of taking a census. Usually these regions coincide with the limits of cities, towns, or other administrative areas. Each tract has a unique numeric code and averages about 4,000 inhabitants. The census tract centroid is the geographic center of the tract based on a weighted distribution of the population within the tract using the census blocks that comprise the tract. A census block is the smallest geographic unit used to tabulate population and each tract can be comprised of several blocks.

as sulfur dioxide, NO_2, CO, and O_3 that tend to co-occur with PM in ambient air, greatly increase the complexity of deriving accurate PM concentration-response functions. Health risk estimates derived in the presence of significant uncertainty tend to rely on very conservative assumptions that may greatly overestimate the potential adverse health effects. Risk assessment has various uncertainties in the methodology and is therefore deliberately designed so that risks are not under predicted. For estimates mortality and morbidity impacts, the following C-R function is used:

$\Delta Y = -Y_O [\exp (-\beta * \Delta PM) - 1] * \text{population}$

Where:

- ΔY: changes in the incidence of a health risk endpoint (in this case changes in mortality or morbidity) corresponding to a particular change in DPM.
- Y_O: baseline occurrence of the health risk endpoint rate per person for the South Coast Air Basin.
- β: the coefficient based on the relative risk that is associated with a particular concentration and varies from one study to another.
- ΔPM: change in DPM concentration estimated by the project's air dispersion modelling ($\mu g/m^3$).
- Population = population of the impacted census tracts and population subgroup exposed to the change in DPM.

To use a C-R function from an epidemiological study to estimate changes in the incidence of a health endpoint corresponding to a particular change in PM in a location, it is important to use appropriate values of parameters for the C-R function, which are the measure of PM, the type of population, and the characterization of the health endpoint should be the same as or as close as possible to those used in the study that estimated the C-R function.

The form of the C-R function was used to predict the effect of changes in ambient PM concentrations on health effects such as premature deaths, cardiac and respiratory hospitalizations, asthma and other lower respiratory symptoms, etc. The parametric values for the variables Y_O and β are provided in Table 4.3-6 along with the averaging time for the estimate of the health risk endpoint.

Table 4.3-6: Parameter Values

Health Risk Endpoint	Averaging Time	Affected Population	Baseline Occurrence (Y_O)	Relative Incidence (β)	Health Risk Endpoint
Long Term Mortality	Annual	Ages 30 years and older	0.001768	0.005827	Long Term Mortality
Chronic Illness: Chronic Bronchitis	Annual	Ages 27 years and older	0.00378	0.0132	Chronic Illness: Chronic Bronchitis
Hospitalization: Chronic Obstruction Pulmonary Disease	Daily	Ages 65 years and older	0.0000259	0.00288	Hospitalization: Chronic Obstruction Pulmonary Disease
Hospitalization: Pneumonia	Daily	Ages 65 years and older	0.0000516	0.00207	Hospitalization: Pneumonia
Hospitalization: Cardiovascular	Daily	Ages 65 years and older	0.000158	0.00119	Hospitalization: Cardiovascular
Hospitalization: Asthma	Daily	Ages 0 to 64 years old	0.00000263	0.00205	Hospitalization: Asthma
Emergency Room Visits for Asthma	Daily	Ages 0 to 64 years old	0.00000448	0.00367	Emergency Room Visits for Asthma

Source: CARB, 2002.

The basic procedure for determining exposures is based on the methods published by the CARB in its development of the technical support to consider amendments to the ambient air quality standards for particulate matter and sulfates (CARB, 2002). Within this assessment, the following information is required to make the relevant health risk endpoint estimates in addition to the C-R function shown in the above equation and the parametric information shown in Table 4.3-6:

- Air pollutant concentrations (represented as the incremental diesel PM impacts from the population affected.)

The incremental air pollutant concentrations of DPM resulting from the project were determined using the USEPA AERMOD air dispersion model and associated emission estimates of DPM. The dispersion model predicted annual estimates of DPM at locations surrounding the project corresponding to the location of population census tracts from the US Census Bureau. To provide estimates of 24-hour DPM, the annual average DPM concentration values calculated by the air dispersion model were multiplied by a factor of 6 which corresponds to the ratio of 24-hour average to annual average air concentrations recommended by the California Office of Environmental Health Hazard Assessment (OEHHA, 2015). The breakdown of the total population by age group for use in the concentration-response functions was accomplished using the 2010 US Census for California age breakdown as shown in Table 4.3-7. This population breakdown was assumed to apply to all census tract receptors to determine the affected population in each census tract.

Table 4.3-7: California Age Breakdown in 2010

Age	Percent of Total Population
<5	7.3%
5-9	8.0%
10-14	7.6%
15-19	7.2%
20-24	7.0%
25-34	15.5%
35-44	16.2%
45-54	12.8%
55 to 59	4.3%
60 to 64	3.4%
65-74	5.6%
75-84	3.8%
>=85	1.6%

Source: USCB, 2014.

Despite a number of uncertainties in the analysis methodology, the expected increase in mortality and morbidity was calculated for the project's toxic air emissions.

Geographic Scope of the Health Risk Assessment. The HRA is characterized by two important differences from the localized significance threshold assessment for criteria pollutants. According to the SCAQMD localized significance threshold assessment methodology, the assessment of localized impacts addresses only those emissions that are generated "onsite", that is for the purposes of this project, emissions generated from within or along the boundaries of the Specific Plan. However, for the HRA, both the universe of the project's emission sources and air dispersion model receptors were expanded to assess the off-site impact of the project's emissions of toxics. Besides onsite emission

sources and receptors, the HRA included a receptor grid that extends up to 5 kilometers (km) from the project boundary and the roadway network that extends 10 km from the project boundary (e.g., including 18 miles on SR-60. This study area reasonably captured the most extensive emissions from project-generated vehicles on the roadway network, since all trips to and from the project would travel on the roadway segments and freeway segments (SR-60) nearest the project site regardless of origin or destination. Since project activity is highest onsite, the project's emissions and associated health impact decreases with distance from the project site. Thus, the selected study area was capable of capturing the project's maximum impact. If the maximum risk from the study area is less than significant, project health risk impacts will be less than significant for receptors further away.

The generation of emissions from traffic traveling along the various arterial and freeway mainline roadway segments requires information on traffic volumes, length of segment, and emission factors. The emission factors, in turn, depend on vehicle type, speed, calendar year, and fuel type. Estimates of peak hour vehicle volumes and types (passenger cars, light heavy duty trucks, medium heavy duty trucks, and heavy-heavy duty trucks) were provided by the traffic consultant for each roadway segment analyzed. The TIA also provided daily vehicle volumes for freeway segments, but not for non-freeway segments. For use in the cancer risk and chronic non-cancer hazard calculations, the daily vehicle volumes for non-freeway segments were assumed to be 10 times that of the peak hour vehicle volumes. The physical length and width of each roadway segment were estimated using the segment location as provided by the traffic consultant and aerial photographs available from Google Earth. Vehicle speeds for each roadway segment and vehicle type were based on the speed groups provided by the traffic consultant.

The health risk analysis examined the following condition:

- Project Development condition which examined the effect of project-related construction and operational traffic diesel PM emissions as if the project were built out in accordance with its proposed phased construction and operational buildout schedule commencing with the construction of Phase 1 in 2020 and the final full build out in 2035.[6] This condition forms the basis for quantifying the incremental impacts from the project.

Annual average diesel PM emissions and impacts were calculated for each year starting from 2020 based on the assumption that diesel exhaust can cause cancer. Specifically, annual average diesel PM concentrations were estimated from the diesel PM construction emissions for each year of construction from 2020 to 2035 according to the construction schedule and equipment usage projected for each year of construction. Project Development examines project impacts resulting from the proposed construction and operation of the project from the commencement of construction in 2020 for a 30-year duration for sensitive/residential receptors, 25-year for worker receptors, and 9-year exposure time periods for school-site student receptors. Annual average diesel PM emissions and impacts during operation were estimated for the Phase 1 build out year and the final full build out year, years for which detailed traffic information was available from the TIA. The annual average operational diesel PM impacts were then interpolated among operational years between 2020 and 2035.

During years when both construction and operations occur simultaneously (2021 to 2035), the annual diesel PM concentrations at the sensitive receptors from construction were added to the annual diesel PM concentrations from operations to provide a total impact assessment of all diesel PM emissions from the project during each year. The resulting total annual average diesel PM concentrations calculated each year for the exposure time period (individual annual averages) multiplied by the requisite daily breathing rates, age sensitivity factors, and time-at-home factors for each year of exposure. The HRA assumed that a fetus in the 3rd trimester (within the mother's womb) commences its lifetime exposure with exposure starting in year 2020 (construction start year) for construction +

[6] In some circumstances, references are made to the year 2035. The year 2035 is the year the conservative construction schedule assumes full completion of project construction. However, detailed traffic volumes were provided by the project traffic consultant for the long-term planning year 2040. Similar to the Phase 1 buildout year, and for purposes of this assessment, the project buildout year is referred to as year 2040 to remain consistent with the TIA.

operation and in year 2040 for full operational. The HRA is being provided to allow decision makers to see the cancer-related impacts of the World Logistics Center project in the assumption that new technology diesel exhaust cause cancer, contrary to what was found by the HEI study. The mitigation conditions require that all diesel trucks accessing the project during operation be model year 2010 or newer and that all on-site equipment be Tier 4.

4.3.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, air quality impacts would occur if the World Logistics Center project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); and/or
- Expose sensitive receptors to substantial pollutant concentrations.

In addition to the Federal and State AAQS, there are daily emissions thresholds for construction and operation of a project in the Basin. The Basin is administered by the SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its *CEQA Air Quality Handbook* (SCAQMD, 1993) and subsequent additions to the Handbook were used in this analysis. It should be noted that the emissions thresholds were established based on the attainment status of the air basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution related to air quality and health risks.

4.3.4.1 Thresholds for Construction Emissions

The following CEQA significance thresholds for regional construction emissions have been established by the SCAQMD for the Basin:

- 75 pounds per day of VOC, also known as reactive organic compounds (ROC).
- 100 pounds per day of NO_X.
- 550 pounds per day of CO.
- 150 pounds per day of PM_{10}.
- 150 pounds per day of SO_X.
- 55 pounds per day of $PM_{2.5}$.

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds are considered to be significant under CEQA.

4.3.4.2 Thresholds for Operational Emissions

Projects with regional operation-related emissions that exceed any of the regional emission thresholds listed below are considered significant under the SCAQMD guidelines.

- 55 pounds per day of VOC, also known as ROC.

- 55 pounds per day of NO_X.
- 550 pounds per day of CO.
- 150 pounds per day of PM_{10}.
- 150 pounds per day of SO_X.
- 55 pounds per day of $PM_{2.5}$.

4.3.4.3 Air Pollutant Standards for CO with Localized Effects

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and Federal CO standards (previously referenced Table 4.3-1). If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or Federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 ppm or more or eight-hour CO concentrations by 0.45 ppm or more. The Basin meets State and Federal attainment standards for CO; therefore, the project would have a significant CO impact if project emissions result in an exceedance of State or Federal one-hour or eight-hour standard. The following emission concentration standards for CO, based on the SCAQMD *CEQA Air Quality Handbook* (1993), apply to the project:

- California State one-hour CO standard of 20.0 ppm.
- California State eight-hour CO standard of 9.0 ppm.

4.3.4.4 Localized Significance Thresholds

The SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 (SCAQMD, 2003), revised July 2008 and *Final Methodology to Calculate Particulate Matter (PM) 2.5 and $PM_{2.5}$ Significance Thresholds* (SCAQMD, 2006), recommending that all air quality analyses include a localized assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of Federal or State AAQS. LSTs are based on the ambient concentrations of that pollutant within the Source Receptor Area (SRA) where a project is located and the distance to the nearest sensitive receptor. The project site is located in the northern portions of SRAs 24 (Moreno Valley) and 28 (San Jacinto).

In the case of CO and NO_2, if ambient levels are below the air standards for these pollutants, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or Federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are nonattainment pollutants in the Basin. For these latter two pollutants, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 $\mu g/m^3$ applies to construction emissions (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of 2.5 $\mu g/m^3$ applies to non-aggregate handling operational activities.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. There are currently six occupied single-family homes and associated ranch/farm buildings in various locations on the World Logistics Center project site. These residences are existing on-site sensitive receptors. The nearest off-site existing sensitive receptors in the vicinity of the project site are the residences located along Bay Avenue, Merwin Street, and west of Redlands Boulevard, and scattered residences along Gilman Springs Road.

Following the SCAQMD LST methodology, for sites larger than 5 acres, air dispersion modeling needs to be conducted. Because the project site greatly exceeds 5 acres, the localized significance for project air pollutant emissions was determined by performing dispersion modeling to determine if the pollutant concentrations would exceed relevant significance thresholds established by the SCAQMD.

The following LSTs were applied to the construction and operation of the project:

- 0.18 ppm (State 1-hour); 0.100 ppm (Federal 1-hour); and 0.03 ppm (Annual) of NO_2 for construction or operations.
- 20 ppm (1-hour) and 9.0 ppm (8-hour) of CO for construction or operation.
- 10.4 µg/m^3 (24-hour) and 1 µg/m^3 of PM_{10} (Annual) for construction.
- 2.5 µg/m^3 (24-hour) and 1.0 ppm (Annual) of PM_{10} for operations.
- 10.4 µg/m^3 (24-hour) of $PM_{2.5}$ for construction.
- 2.5 µg/m^3 (24-hour) of $PM_{2.5}$ for operation.

Note that when construction and operational activities occur at the same time, the SCAQMD recommends application of the significance thresholds for operation apply in determining emission significance

4.3.4.5 Health Risk Significance Thresholds

For pollutants without defined significance standards or air contaminants not covered by the standard criteria cited above, the definition of substantial pollutant concentrations varies. For toxic air contaminants (TAC), "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk management level.

The SCAQMD has defined several health risk significance thresholds that it recommends to Lead Agencies in assessing a project's health risk impacts. The City of Moreno Valley has not adopted its own set of thresholds. Therefore, the following SCAQMD thresholds were adopted for the project.

- **Maximum Individual Cancer Risk (MICR)and Cancer Burden.** MICR is the estimated increase in lifetime probability of the maximally exposed individual contracting cancer as a result of exposure to TACs over the applicable exposure period. Cancer burden multiples the cancer risk by the exposed population to estimate the number of individuals that would be expected to contract cancer from the project.

  A significant impact would occur for:

  (A) An increased MICR greater than 10 in 1 million at any receptor location; or

  (B) A cancer burden greater than 0.5

- **Chronic Hazard Index (HI).** This is the ratio of the estimated long-term level of exposure to a TAC for a potential maximally exposed individual to its chronic reference exposure level. A reference exposure level is the exposure level below which an adverse health effect will not occur as determined by health professionals The chronic HI calculations include multi-pathway consideration, when applicable.

  A significant impact would occur if the increase in total chronic HI for any target organ system due to exposure to total TAC emissions from the project exceeds 1.0 at any receptor location.

- **Acute Hazard Index (HI).** This is the ratio of the estimated maximum one-hour concentration of a TAC for a potential maximally exposed individual to its acute reference exposure level, the

exposure level below which an adverse health effect will not occur as determined by health professionals (see Section 4.3.2.3).

A significant impact would occur if the increase in total acute HI for any target organ system due to exposure to total TAC emissions from the project exceeds 1.0 at any receptor location.

4.3.5 Less than Significant Impacts

The following impact was determined to be less than significant (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.3.5.1 Long-Term Microscale (CO Hot Spot) Emissions

Impact 4.3.5.1: The World Logistics Center project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation for CO.

Threshold	Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation? For CO, the applicable thresholds are: - California State one-hour CO standard of 20.0 ppm; and - California State eight-hour CO standard of 9.0 ppm.

Vehicular trips associated with the development of the World Logistics Center project could contribute to congestion at intersections and along roadway segments in the project vicinity resulting in potential local CO "hot spot" impacts. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle travel speeds and idling time and, thus, traffic flow conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, schoolchildren, etc.). High CO concentrations are typically associated with roadways or intersections operating at unacceptable levels of service or with very high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

Carbon monoxide (CO) "hot spot" thresholds ensure that emissions of CO associated with traffic impacts from a project in combination with CO emissions from existing and forecast regional traffic do not exceed State or Federal standards for CO at any traffic intersection affected by the project. Project concentrations may be considered significant if a CO hot spot intersection analysis determines that project-generated CO concentrations cause a localized violation of the State CO 1-hour standard of 20 ppm, State CO 8-hour standard of 9 ppm, Federal CO 1-hour standard of 35 ppm, or Federal CO 8-hour standard of 9 ppm.

A CO hot spot is a localized concentration of CO that is above the State or Federal 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. To provide a worst-case scenario, CO concentrations are estimated at project-impacted intersections where the concentrations would be the greatest.

This analysis follows guidelines recommended by the CO Protocol (University of California, Davis, 1997) and the SCAQMD. According to the CO Protocol, intersections with Level of Service (LOS) E or F require detailed analysis. In addition, intersections that operate under LOS D conditions in areas that experience meteorological conditions favorable to CO accumulation require a detailed analysis. The LOS for intersections is determined in the TIA (refer to Section 4.15 of this Revised FEIR, Traffic and

Circulation). The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria: (1) the intersection is at LOS D or worse and where the project increases the volume to capacity ratio by 2 percent, or (2) the project decreases LOS at an intersection from C to D. A decrease in LOS, i.e., from C to D, means that there is more traffic and more delay at the intersection.

For this project analysis, the intersections with the highest traffic volumes and the LOS E or F before mitigation were identified for 2025 using information from the table in the TIA "Intersection LOS under 2025 Plus Phase 1 Conditions." The intersections with the greatest LOS before mitigation were also identified for 2040 using information from the table in the TIA "Intersection LOS under 2040 Plus Build-out Conditions."

The CO concentrations were estimated using the CALINE4 model using 2025 and 2040 emission factors. The emission factors are for "all" vehicle classes and are not adjusted for a project-specific fleet to provide a worst-case scenario. In addition, the emission factors do not take into account the project mitigation reductions from requiring that all diesel trucks are model year 2010 or newer.

Table 4.3-8 shows estimated CO concentrations at year 2025 plus project traffic conditions. The estimated CO concentrations at year 2040 are shown in Table 4.3-9. As shown in the tables, the estimated 1-hour and 8-hour average CO concentrations from project-generated and cumulative traffic plus the background concentrations are below the State and Federal standards. No CO hot spots are anticipated because of traffic-generated emissions by the project in combination with other anticipated development in the area. Therefore, the mobile emissions of CO from the project are not anticipated to contribute substantially to an existing or projected air quality violation of CO. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact. No mitigation is required.

Table 4.3-8: Carbon Monoxide Concentrations at Intersections, 2025

Intersection	Peak Hour	CO Concentration (ppm)		Significant Impact?
		1 Hour	8 Hour	
Alessandro Boulevard and Chicago Avenue	PM	5.2	3.5	No
Alessandro Boulevard and Canyon Crest Drive	PM	4.8	3.2	No
Alessandro Boulevard and Mission Grove Parkway	PM	4.3	2.9	No
Arlington Avenue and Victoria Avenue	PM	4.3	2.9	No
Alessandro Boulevard and Sycamore Canyon Boulevard	AM	4.3	2.9	No

- ppm = parts per million
- A significant impact would occur if the estimated CO concentration is over the 1-hour State standard of 20 ppm or the 8-hour State/Federal standard of 9 ppm.

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-9: Carbon Monoxide Concentrations at Intersections, 2040

Intersection	Peak Hour	CO Concentration (ppm)		Significant Impact?
		1 Hour	8 Hour	
Alessandro Boulevard and Chicago Avenue	PM	4.5	3.0	No
Alessandro Boulevard and Canyon Crest Drive	PM	4.6	3.1	No
Alessandro Boulevard and Sycamore Canyon Boulevard	PM	4.2	2.8	No
Ramona Expressway and Sanderson Avenue	PM	4.7	3.1	No
Alessandro Boulevard and Mission Grove Parkway	PM	4.2	2.8	No

- ppm = parts per million
- A significant impact would occur if the estimated CO concentration is over the 1-hour State standard of 20 ppm or the 8-hour State/Federal standard of 9 ppm.

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

4.3.6 Significant Impacts

The following impacts were determined to be potentially significant. In each of the following issues, mitigation measures have been recommended to reduce the significance of the identified impacts.

4.3.6.1 Air Quality Plan Management Plan Consistency

Impact 4.3.6.1: *Implementation of the World Logistics Center project has the potential to conflict with implementation of the SCAQMD 2012 AQMP.*

Threshold	Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

According to the 1993 SCAQMD Handbook, there are two key indicators of consistency with the Air Quality Management Plan (AQMP):

1. Indicator: Whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. Indicator: A project would conflict with the AQMP if it would exceed the assumptions in the AQMP in 2012 or increments based on the year of project buildout and phase. The Handbook indicates that key assumptions to use in this analysis are population number and location and a regional housing needs assessment. The parcel-based land use and growth assumptions and inputs used in the Regional Transportation Model run by the Southern California Association of Governments that generated the mobile inventory used by the SCAQMD for AQMP are not available and assumed not to include the project; therefore, the SCAQMD's significance thresholds are used to determine if the project exceeds the assumptions in the AQMP.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis utilizes the following criteria to address this potential impact:

- Project's contribution to air quality violations (SCAQMD's first indicator, 1 as listed above);
- Assumptions in AQMP (SCAQMD's second indicator, 2, as listed above); and
- Compliance with applicable emission control measures in the AQMPs.

Project's Contribution to Air Quality Violations and Assumptions in AQMP. According to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the

frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (SCAQMD, 1993, page 12-3). As shown in analyses in Impacts 4.3.6.2, 4.3.6.3, and 4.3.6.4, the project could violate an air quality standard and therefore could contribute substantially to an existing or projected air quality violation.

If a project's emissions exceed the SCAQMD regional thresholds for NO_X, VOC, PM_{10}, or $PM_{2.5}$, it follows that the emissions could cumulatively contribute to an exceedance of a pollutant for which the Basin is in nonattainment (ozone, PM_{10}, and $PM_{2.5}$) at a monitoring station in the Basin. The thresholds are criteria for determining environmental significance and are discussed in the SCAQMD's 1993 Handbook for Air Quality Analysis. An exceedance of a nonattainment pollutant at a monitoring station would not be consistent with the goals of the AQMP—to achieve attainment of pollutants. As discussed in the analyses below (Impact 4.3.6.2, Construction Emissions, and Impact 4.3.6.4, Long-Term Operational Emissions), the project would exceed the regional emission significance thresholds for VOC, NO_X, CO, PM_{10}, and/or $PM_{2.5}$ prior to the application of mitigation. This means that project emissions could combine with other sources and could result in an ozone, PM_{10}, or $PM_{2.5}$ exceedance at a nearby monitoring station. The Basin in which the project is located is in nonattainment for these pollutants; therefore, according to this criterion, the project would not be consistent with the AQMP. The regional emissions assume a zero baseline for existing emissions on the project site and therefore assumes that the AQMP had no emissions for the project site. The regional significance thresholds can be interpreted to mean that if project emissions exceed the thresholds, then the project would also not be consistent with the assumptions in the AQMP. Therefore, based on this criterion, the project could contribute to air quality violations and would not be consistent with the AQMP.

Compliance with Emission Control Measures. The second indicator of whether the project could conflict with or obstruct implementation of the AQMP is by assessing the project's compliance with the control measures in the AQMPs and the State Implementation Plan (SIP).

2012 AQMP. The project would comply with all applicable rules and regulations enacted as part of the AQMP. In addition, the AQMP relies upon the SCAG regional transportation strategy, which is in its adopted 2012–2035 RTP/SCS and 2011 FTIP. Included in the RTP/SCS are transportation control measures including active transportation (non-motorized transportation, e.g., biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance.

2016 AQMP. As stated previously, the SCAQMD recently approved on March 3, 2017 the Final 2016 AQMP. Currently, the 2016 AQMP is being reviewed by the U.S. EPA and CARB. Until the approval of the EPA and CARB, the current regional air quality plan is the Final 2012 AQMP adopted by the SCAQMD on December 7, 2012. Therefore, consistency analysis with the 2016 AQMP has not been included. Nonetheless, the project would comply with all applicable rules and regulations enacted as part of the 2016 AQMP, including transportation control measures from the 2016 RTP/SCS.

State Implementation Plans. Geographical areas in the State that exceed the Federal air quality standards are called nonattainment areas. The project area is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$. SIPs show how each area will attain the Federal standards. To do this, the SIPs identify the amount of pollutant emissions that must be reduced in each area to meet the standard and the emission controls needed to reduce the necessary emissions. On September 27, 2007, the CARB adopted its State Strategy for the 2007 SIP. In 2009, the SIP was revised to account for emissions reductions from regulations adopted in 2007 and 2008 and clarifies CARB's legal commitment. Additional recent revisions to the SIP are as follows:

- In 2008, the EPA revised the lead[7] national ambient air quality standard by reducing it to 0.15 $\mu g/m^3$. On December 31, 2010, the Los Angeles County portion of the Basin was designated as

[7] Lead referred to here is a chemical element; a heavy metal.

nonattainment for the 2008 lead national standard as a result of exceedances measured near a large lead-acid battery recycling facility. The 2012 Lead SIP for Los Angeles County was prepared by the SCAQMD and addresses the recent revision to the lead national standard, and outlines the strategy and pollution control activities that demonstrate attainment of the lead national standard before December 31, 2015. The 2012 Lead SIP was approved May 4, 2012.

- A SIP revision for the federal nitrogen dioxide standard was prepared in 2012, to address the new 1-hour federal ambient air quality standard for nitrogen dioxide.
- The proposed California Infrastructure SIP revision was considered by the CARB on January 23, 2014. The proposed Infrastructure SIP revision is administrative in nature and covers the National Ambient Air Quality Standards (federal standards) for ozone (1997 and 2008), fine particulate matter ($PM_{2.5}$; 1997, 2006, and 2012), lead (2008), nitrogen dioxide (2010), and sulfur dioxide (2010). The proposed revision describes the infrastructure (authorities, resources, and programs) California has in place to implement, maintain, and enforce these federal standards. It does not contain any proposals for emission control measures.

The SIP takes into account CARB rules and regulations. The project will comply with applicable rules and regulations as identified in the AQMPs and SIPs and therefore, complies with this criterion.

Summary. Although the project would be consistent with the policies, rules, and regulations in the AQMPs and SIPs, the project must meet all the criteria listed above to be consistent with the AQMPs. The project could impede AQMP attainment because its construction and operation emissions exceed the SCAQMD regional significance thresholds, so the project is considered to be inconsistent with the AQMP.

Mitigation Measures. Applicable SCAQMD regulatory requirements are restated in the mitigation measures identified below in Section 4.3.6.2 and 4.3.6.3. These measures shall be incorporated in all project plans, specifications, and contract documents. **Mitigation Measures 4.3.6.2A, 4.3.6.2B, 4.3.6.2C, 4.3.6.2D, 4.3.6.3A, 4.3.6.3B, 4.3.6.3C, 4.3.6.3D,** and **4.3.6.4A** are required.

Level of Significance After Mitigation. Implementation of the World Logistics Center project would exceed applicable thresholds for all criteria pollutants, with the exception of SO_X, as noted below. Despite the implementation of mitigation measures, emissions associated with the project cannot be reduced below the applicable thresholds. Construction and operational emissions would be reduced to the extent feasible through implementation of mitigation measures listed above and described below. Construction emissions would be reduced through implementation of mitigation measures that require the use of Tier 4 construction equipment, reduced idling time, use of non-diesel equipment where feasible, low-VOC paints and cleaning solvents, and dust suppression measures. Operational emissions would be reduced through implementation of mitigation measures that require reduced vehicle idling, use of non-diesel on-site equipment, meeting or exceeding 2010 engine emission standards for all diesel trucks entering the site, electric vehicle charging stations, and prohibition of refrigerated warehouses. In the absence of further feasible mitigation to reduce the project's emission of criteria pollutants to below SCAQMD thresholds, potential air quality impacts resulting from exhaust from construction equipment will remain significant and unavoidable.

4.3.6.2 Regional Construction Emissions

Impact 4.3.6.2: *Construction of the World Logistics Center project has the potential to exceed applicable daily thresholds that may affect sensitive receptors.*

Threshold	Would the proposed project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? For construction operations, the applicable daily thresholds are: - 75 pounds per day of ROC/VOC;

- 100 pounds per day of NO_X;
- 550 pounds per day of CO;
- 150 pounds per day of PM_{10};
- 150 pounds per day of SO_X; and
- 55 pounds per day of $PM_{2.5}$.

Grading and other construction activities produce combustion emissions from various sources such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions during these construction activities will vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions. Activity during peak grading days typically generates a greater amount of air pollutants than other project construction activities.

While the actual details of the future construction schedule are not known, it is expected that project construction would occur in two phases with seven discrete activities in Phase 1 and eight discrete activities in Phase 2. For Phase 1, the following activities are assumed to occur over the course of seven years in the analysis: 1) rough grading, which includes mass site grading; 2) finish grading; 3) building construction; 4) infrastructure construction which includes utility installation; 5) curb, gutter, sidewalk, subgrade preparation, drop rock, and paving activities; 6) asphalt paving; and 7) landscaping. For Phase 2, the same activities are assumed to occur over the course of nine years in the analysis, and includes interchange construction as the eighth activity. Within the "building construction" phase, it is assumed that there would also be subphases of concrete pouring, installation of wet utilities, electrical installation, and landscaping. Appendix A of this Revised Sections of the FEIR includes details of the emission factors and other assumptions.

Table 4.3-10 identifies projected emissions resulting from grading and construction activities for the World Logistics Center project and shows the estimated maximum daily construction emissions over the course of project construction prior to the application of mitigation.

Table 4.3-10: Short-Term Regional Construction Emissions–Without Mitigation

	Maximum Daily Pollutant Emissions (lbs/day)								
Year	VOC	NO_X	CO	PM_{10} dust	PM_{10} exhaust	PM_{10} Total	$PM_{2.5}$ dust	$PM_{2.5}$ exhaust	$PM_{2.5}$ Total
2020	281	639	407	99	25	117	11	23	31
2021	270	460	434	97	20	117	11	18	29
2022	298	776	645	132	30	162	15	28	43
2023	262	347	419	97	14	111	11	13	24
2024	343	1,233	992	177	47	224	20	43	63
2025	263	342	457	105	13	118	12	12	24
2026	282	536	595	144	20	164	16	18	35
2027	269	415	476	114	15	130	13	14	27
2028	296	690	663	39	26	165	16	24	39
2029	281	543	560	125	20	145	14	19	33
2030	309	391	605	128	12	140	15	12	26
2031	268	207	427	97	5	102	11	5	16
2032	307	391	616	131	12	143	15	12	26
2033	297	340	565	125	10	135	14	10	24
2034	268	206	426	97	5	102	11	5	16
2035	282	237	511	117	5	122	13	5	19

Table 4.3-10: Short-Term Regional Construction Emissions–Without Mitigation

Year	Maximum Daily Pollutant Emissions (lbs/day)								
	VOC	NO_X	CO	PM_{10} dust	PM_{10} exhaust	PM_{10} Total	$PM_{2.5}$ dust	$PM_{2.5}$ exhaust	$PM_{2.5}$ Total
SCAQMD Threshold	**75**	**100**	**550**	**NA**	**NA**	**150**	**NA**	**NA**	**55**
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	**NA**	**NA**	**Yes**	**NA**	**NA**	**Yes**

- Sulfur oxide (SOx) emissions are contained in the CalEEMod output; the maximum emissions would be 2 pounds per day, substantially under the threshold of 150 pounds per day.
- Dust plus exhaust emissions may not add up to total emissions for both PM10 and PM2.5 because the numbers included in this table are the maximum emissions between winter and summer model outputs for each of the three categories.
- The emissions assume all construction activities (mass grading, fine grading, building, utilities, curbing, landscaping, painting, paving, and/or interchange) occur on the same day, depending on the year in which the activity occurs.
- Emissions assume compliance with SCAQMD Rule 403.

VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
NA = not applicable as there is no separate threshold for dust/exhaust
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

The construction emissions estimates summarized in Table 4.3-10 are based on the assumed construction scenario described in Appendix A, of this Revised Sections of the FEIR. Using emission factors from the CalEEMod model, Table 4.3-10 indicates that construction emissions of criteria pollutants would exceed the SCAQMD daily emission thresholds for all criteria pollutants (VOC, NOx, CO, PM_{10}, and $PM_{2.5}$), with the exception of SO_X.[8] This is a significant impact requiring mitigation.

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, and cut-and-fill grading operations. Dust generated during construction varies substantially by project, depending on the level of activity, the specific operations and equipment, local soils, and weather conditions at the time of construction. The World Logistics Center project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust. There are a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction.

As identified in Table 4.3-10, fugitive dust and exhaust emissions during the anticipated peak construction day for the World Logistics Center project would exceed SCAQMD daily construction thresholds. The percentage of dust and exhaust varies by year but for PM_{10} is an average of 88 percent dust and 12 percent exhaust. $PM_{2.5}$ has an average of 50 percent dust and 50 percent exhaust.

Concrete pouring would likely occur during nighttime hours due to limitations high temperatures pose for concrete work during the day. On-site equipment used during concrete pouring would involve daytime prep with actual concrete pouring occurring during the nighttime hours. On average, the total hours of operation for each piece of equipment during the concrete phase would be approximately 10 hours. Therefore, maximum daily emissions presented in Table 4.3-10 represent the average concrete pour day. However, under rare occurrences, extended concrete pour days may be required. Table 4.3-11 summarizes daily maximum emissions for each year of construction associated with 24-hour operation of on-site building concrete equipment. As shown in Table 4.3-11, maximum 24-hour concrete pour days would exceed SCAQMD thresholds for NO_X. However, all maximum daily emissions are less than those for the worst-case construction day as summarized in Table 4.3-10. Therefore, rare 24-hour concrete pour days would be within the estimated worst-case construction day assumptions. No further analysis of 24-hour concrete pour days is required.

Similar to extended concrete pouring days, other phases of construction such as utility installation and building construction may require an occasional extended construction day based on the task at hand

[8] The project would emit SO_X from construction equipment exhaust; however, the maximum emissions (2 pounds per day) are less than significant as they are far below the threshold of 150 pounds per day.

and schedule goals. Occasional extended construction hours would occur for specific tasks within specific planning areas as needed (determined on a day-to-day basis) and would not occur site-wide throughout the 16-year construction period. Therefore, it is anticipated that estimated yearly maximum construction day emissions, as summarized in Table 4.3-10, represent the realistic worst-case regional construction emissions for the 16-year construction duration. Therefore, no further analysis of potential extended construction days is required.

Table 4.3-11: Short-Term Regional 24-hour Concrete Pour Emissions–Without Mitigation

	Maximum Daily Pollutant Emissions (lbs/day)				
Year	VOC	NO_X	CO	PM_{10} Total	$PM_{2.5}$
2020	No Concrete Phase				
2021	17.01	151.89	166.94	8.76	7.56
2022	15.74	138.58	165.83	7.71	6.57
2023	14.86	127.45	165.21	6.94	5.84
2024	14.29	121.56	165.30	6.37	5.30
2025	13.53	114.23	164.89	5.66	4.64
2026	13.52	114.13	164.83	5.66	4.63
2027	13.52	114.04	164.77	5.66	4.63
2028	13.51	113.97	164.72	5.66	4.63
2029	13.50	113.90	164.67	5.66	4.63
2030	14.15	91.24	169.34	3.48	2.63
2031	14.14	91.21	169.31	3.48	2.63
2032	14.13	91.15	169.27	3.48	2.63
2033	14.13	91.10	169.24	3.47	2.63
2034	14.12	91.06	169.20	3.47	2.63
2035	13.36	84.68	169.02	2.94	2.10
SCAQMD Threshold	**75**	**100**	**550**	**150**	**55**
Exceeds Threshold?	**No**	**Yes**	**No**	**No**	**No**

- Sulfur oxide (SOx) emissions are contained in the CalEEMod output; the maximum emissions would be 2 pounds per day, substantially under the threshold of 150 pounds per day.
- The emissions assume all construction activities (mass grading, fine grading, building, utilities, curbing, landscaping, painting, paving, and/or interchange) occur on the same day, depending on the year in which the activity occurs.
- Emissions assume compliance with SCAQMD Rule 403.

VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
NA = not applicable as there is no separate threshold for dust/exhaust
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

The World Logistics Center project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires implementation of dust-suppression techniques to prevent fugitive dust from creating a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors. The applicable Rule 403 measures are as follows:

- All clearing, grading, earthmoving, or excavation activities shall cease when winds exceed 25 miles per hour per SCAQMD guidelines in order to limit fugitive dust emissions.

- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meter (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicular Code Section 23114.
- The contractor shall ensure that traffic speeds on unpaved roads and project site areas are 15 miles per hour or less to reduce fugitive dust haul road emissions.

As previously discussed, SCAQMD Rule 1113 regulates the sale and application of architectural coatings. Rule 1113 is applicable to any person who applies or solicits the application of any architectural coating within the Basin. Rule 1113 sets limits on the amount of ROG or VOC emissions allowed for all types of architectural coatings. Compliance with Rule 1113 means that architectural coatings used during construction would have ROG or VOC emissions that comply with these limits.

Mitigation Measures. The following measures are recommended to reduce the level of emissions of criteria pollutants:

4.3.6.2A Construction equipment maintenance records (including the emission control tier of the equipment) shall be kept on site during construction and shall be available for inspection by the City of Moreno Valley.

a) Off-road diesel-powered construction equipment greater than 50 horsepower shall meet United States Environmental Protection Agency Tier 4 off-road emissions standards. A copy of each unit's certified tier specification shall be available for inspection by the City at the time of mobilization of each applicable unit of equipment.

b) During all construction activities, off-road diesel-powered equipment may be in the "on" position not more than 10 hours per day.

c) Construction equipment shall be properly maintained according to manufacturer specifications.

d) All diesel powered construction equipment, delivery vehicles, and delivery trucks shall be turned off when not in use. On-site idling shall be limited to three minutes in any one hour.

e) Electrical hook ups to the power grid shall be provided for electric construction tools including saws, drills and compressors, where feasible, to reduce the need for diesel-powered electric generators. Where feasible and available, electric tools shall be used.

f) The project shall demonstrate compliance with South Coast Air Quality Management District Rule 403 concerning fugitive dust and provide appropriate documentation to the City of Moreno Valley.

g) All construction contractors shall be provided information on the South Coast Air Quality Management District Surplus Off-road Opt-In "SOON" funds which provides funds to accelerate cleanup of off-road diesel vehicles.

h) Construction on-road haul trucks shall be model year 2010 or newer if diesel-fueled.

i) Information on ridesharing programs shall be made available to construction employees.

j) During construction, lunch options shall be provided onsite.

k) A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints per AQMD Standards.

l) Off-site construction shall be limited to the hours between 6 a.m. to 8 p.m. on weekdays only. Construction during City holidays shall not be permitted.

4.3.6.2B Prior to issuance of any grading permits, a Construction Staging Plan shall be submitted to and approved by the City of Moreno Valley that describes in detail the location of equipment staging areas, stockpiling/storage areas, construction parking areas, safe detours around the project construction site, as well as provide temporary traffic control (e.g., flag person) during construction-related truck hauling activities. Construction trucks shall be rerouted away from sensitive receptor areas. Trucks shall use State Route 60 using World Logistics Center Parkway (formerly Theodore Street), Redlands Boulevard (north of Eucalyptus Avenue), and Gilman Springs Road. In addition to its traffic safety purpose, the Construction Staging Plan can minimize traffic congestion and delays that increase idling emissions. A copy of the approved Traffic Control Plan shall be retained on site in the construction trailer.

4.3.6.2C The following measures shall be applied during construction of the project to reduce volatile organic compounds (VOC):

a) Non-VOC containing paints, sealants, adhesives, solvents, asphalt primer, and architectural coatings (where used), or pre-fabricated architectural panels shall be used in the construction of the project to the maximum extent practicable. If such products are not commercially available, products with a VOC content of 100 grams per liter or lower for both interior and exterior surfaces shall be used.

b) Leftover paint shall be taken to a designated hazardous waste center.

c) Paint containers shall be closed when not in use

d) Low VOC cleaning solvents shall be used to clean paint application equipment.

e) Paint and solvent-laden rags shall be kept in sealed containers.

4.3.6.2D No grading shall occur on days with an Air Quality Index forecast greater than 150 for particulates or ozone as forecasted for the project area (Source Receptor Area 24).

Level of Significance After Mitigation. Significant and unavoidable. As shown in Table 4.3-12, construction emissions are still significant after mitigation, with the exception of $PM_{2.5}$. The reduction in $PM_{2.5}$ emissions is by a reduction in exhaust from the application of Tier 4 off-road equipment. PM_{10} emissions are still significant because emissions in 2024 exceed the threshold; however, emissions of PM_{10} during all other years of construction are less than significant. Although mitigation reduces emissions of all pollutants during construction, potential air quality impacts resulting from exhaust from construction equipment and fugitive dust will remain significant and unavoidable.

The results of this regional construction analysis indicate that during project construction, project emissions combined with regional emissions within the South Coast Air Basin, would result in the following cumulative health effects from ozone exposure:[9]

- Irritation of respiratory system; reduction in lung function; changes in breathing patterns; reduction of breathing capacity; inflammation of and damage to cells that line the lungs; increase in lung susceptibility to infection; aggravation of asthma; aggravation of other chronic lung diseases; permanent lung damage; some immunological changes; and/or increased mortality risk.

[9] Although carbon monoxide emissions are over the threshold, it is primarily a localized pollutant. The localized analyses demonstrated that concentrations would not exceed the ambient air quality standards for carbon monoxide; therefore, less than significant health effects are anticipated.

Table 4.3-12: Mitigated Short-Term Regional Construction Emissions

Year	Maximum Daily Pollutant Emissions (lbs/day)				
	VOC	NO_X	CO*	PM_{10}	$PM_{2.5}$
2020	149	178	452	102	15
2021	151	177	493	101	15
2022	165	200	741	136	19
2023	149	142	488	100	14
2024	167	235	1135	182	25
2025	150	140	537	108	15
2026	155	170	718	147	20
2027	151	143	567	117	16
2028	157	173	803	143	19
2029	154	157	675	128	17
2030	160	160	808	131	18
2031	151	121	490	99	13
2032	160	162	803	134	18
2033	158	152	723	128	17
2034	151	121	489	99	13
2035	155	133	636	119	16
SCAQMD Threshold	**75**	**100**	**550**	**150**	**55**
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	**Yes**	**No**

* There is an error in the way CalEEMod estimates the effect of a higher tier (such as Tier 3 or 4) on mitigated CO; therefore, the mitigated CO values are greater than unmitigated values.

- Sulfur oxide (SOx) emissions are contained in the CalEEMod output in Appendix A of the Air Quality, Greenhouse Gas, and Health Risk Assessment Report; the maximum emissions would be approximately 2 pounds per day after mitigation, substantially under the threshold of 150 pounds/day.
- Mitigation Measure 4.3.6.2A(a) was estimated by CalEEMod using its mitigation module by assuming Tier 4 off-road equipment for equipment greater than 50 horsepower.
- Mitigation Measure 4.3.6.2A(b) restricts equipment from operating more than 10 hours per day in the on position, which is estimated in CalEEMod in both the unmitigated and mitigated estimates.
- Mitigation Measures 4.3.6.2A(c) through (e), 4.3.6.2A(g) through (m), 4.3.6.2B, and 4.3.6.2D are not quantified.
- Mitigation Measure 4.3.6.2A(f) is assumed in the unmitigated and mitigated estimates (Rule 403).
- Mitigation Measure 4.3.6.2A(i) requires that construction haul trucks be 2007 model year or greater. CalEEMod does not have a mitigation measure embedded in the model to quantify the reduction from this measure. Therefore, this reduction quantification was not provided.
- Mitigation Measure 4.3.6.2C reduces VOC emissions during painting and is calculated as demonstrated in the spreadsheets in Appendix A of the Air Quality, Greenhouse Gas, and Health Risk Assessment Report.

VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

4.3.6.3 Localized Construction and Operational Air Quality Impacts

Impact 4.3.6.3: *Construction and operation of the World Logistics Center project has the potential to exceed localized daily thresholds that may affect sensitive receptors.*

Threshold	Would the proposed project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? The applicable localized thresholds are: - 20 ppm (1 hour) and 9 ppm (8 hours) of CO during construction or operation; - 0.18 ppm (State 1 hour), 0.100 ppm (National 1 hour), and 0.030 ppm (Annual) of NO_X during construction or operation; - 10.4 µg/m^3 (24 hours) 1.0 µg/m^3 (Annual) of PM_{10} during construction - 2.5 µg/m^3 (24 hours) and 1.0 µg/m^3 (Annual) of PM_{10}; during operation and - 2.5 µg/m^3 (24 hours) of $PM_{2.5}$ during operation - During time periods when construction and operational activities occur at the same time, the SCAQMD recommends application of the significance thresholds for operations to assess the significance of the activities

The localized analysis focused on three potential scenarios:

1. Project Phase 1 (2018), which evaluates the air quality impacts if Phase 1 of the project (approximately 57 percent of the square footage) was built out in full in 2018[10] and no other changes occurred to land uses or the roadway system;
2. Project Phase 1 and Phase 2 Full Build Out (2018), which evaluates what air quality impacts would arise if the entire project, both Phase 1 and Phase 2, were built out in full in 2018 and no other changes occurred to land uses or the roadway system; and
3. Project Development Schedule, which evaluates the air quality impacts from the following scenarios:

    - o 2025, the earliest year Phase 1 is assumed to be fully operational. When the projected construction schedule would result in construction activities in the southern portion of the project adjacent to Alessandro Boulevard and east of the existing residential areas along Merwin Street, and when all of Phase I operations would occur (approximately 57 percent of entire project floor space);
    - o 2032, the year when the project emissions from both project construction and operation are at their highest combined levels for several pollutants; and when construction activities would occur adjacent to the existing residences along Gilman Springs Road (eastern portion of site); and
    - o 2040[11] when the Phase 1 and Phase 2 of the project are fully operational.

The Project Phase 1 (2018) and Project Phase 1 and Phase 2 Full Build Out (2018) conditions represents hypothetical worst-case conditions in that the project physically could not be built-out in 2018 or, in fact, in any single year due to the size of the project. These conditions have been included in this assessment to correspond to the analysis scenarios examined in the project TIA. These conditions also do not account for the fact that vehicle emissions are expected to decline over time as vehicle emission control technologies improve. Thus, consideration of these conditions will significantly overestimate the project's potential air quality impacts. The Project Development condition represents the logical and realistic

[10] 2018 is the CEQA Baseline year for purposes of this analysis.

[11] *In some circumstances, references are made to the year 2035. The year 2035 is the year the construction schedule assumes full completion of project construction. However, detailed traffic volumes were provided by the project traffic consultant for the long-term planning year 2040. Similar to the Phase 1 buildout year, and for purposes of this assessment, the project buildout year is referred to as year 2040 to remain consistent with the TIA.*

development of the project over a period of 16 years as represented by the project applicant. The LST analysis is presented for each condition below.

Pursuant to the SCAQMD's LST methodology, only emissions generated from emission sources located within and along the project boundaries are included in the LST assessment. These emission sources include vehicle travel on the roadway network within and along the borders of the project and emissions from support equipment including forklifts, yard/hostler trucks, and emergency standby electric generators.

The project's emissions then served as input into the AERMOD air dispersion model to derive estimate of the project's localized air quality impacts for each condition.

Project Phase 1 (2018) LST Assessment

The project's on-site emissions were estimated from the traffic-generated by the various project vehicles as provided by the TIA. Vehicle emissions were assumed to be representative of the calendar year 2018 vehicle fleet. Also included were emissions from various support equipment including forklifts, yard trucks, and standby emergency generators. The localized assessment results for the Project Phase 1 (2018) condition are provided in Table 4.3-13 for receptors located within the project boundaries and in Table 4.3-14 for receptors located outside the project's boundaries along with a comparison to the SCAQMD's localized significance thresholds. The significance thresholds for CO and nitrogen dioxide are derived from the measured ambient air quality data from the SCAQMD Riverside air monitoring station and serve as the measure of existing air quality.[12]

As noted from Table 4.3-13, the project would not exceed the SCAQMD's localized significance thresholds for any of the pollutants studied at receptors located within the project boundaries. As shown in Table 4.3-14, the significance thresholds would not be exceeded at any sensitive receptor located outside of the project boundaries.

The Project Phase 1 and Phase 2 Full Build Out (2018) LST Assessment

The localized assessment results for the Project Phase 1 and Phase 2 Full Build Out (2018) condition are provided in Table 4.3-15 for receptors located within the project boundaries and in Table 4.3-16 for receptors located outside the project's boundaries along with a comparison to the SCAQMD's localized significance thresholds. The significance thresholds for CO and nitrogen dioxide are derived from the measured ambient air quality data from the SCAQMD Riverside air monitoring station and serve as the measure of existing air quality.

As noted from Table 4.3-15, the project would exceed the SCAQMD's significance thresholds for the annual PM_{10} threshold for receptors located within the project's boundaries. As shown in Table 4.3-16, the significance thresholds would not be exceeded at any sensitive receptor located outside of the project boundaries.

[12] In keeping with the SCAQMD recommendations, the highest NO_2 and CO air quality measurements over a 3-year rolling average was used to determine existing background conditions. Historical data for years 2014, 2015, 2016, and 2017 were obtained from SCAQMD's Riverside-Rubidoux air monitoring station.

Table 4.3-13: Localized Assessment of Project Phase 1 (2018) Emissions Maximum Impacts Within the Project Boundaries (without mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.01	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.01	0.08	0.18	No
	National 1 hour, ppm	0.053	0.01	0.06	0.100	No
	Annual, ppm	0.015	0.004	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	1.7	1.7	2.5	No
	Annual, $\mu g/m^3$	NA	0.99	0.99	1.0	No
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.5	0.5	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.
[2] Highest impacts generally occur at the existing residences within the project boundaries.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-14: Localized Assessment of Project Phase 1 (2018) Emissions Maximum Impacts Outside of the Project Boundaries (without mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.01	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.01	0.07	0.18	No
	National 1 hour, ppm	0.053	0.01	0.06	0.100	No
	Annual, ppm	0.015	0.001	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	0.8	0.8	2.5	No
	Annual, $\mu g/m^3$	NA	0.4	0.4	1.0	No
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.2	0.2	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.[2] Highest impacts generally occur at the existing residences along Gilman Springs Road to the east of the project.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-15: Localized Assessment of Project Phase 1 and Phase 2 Full Build Out (2018) Emissions Maximum Impacts Within the Project Boundaries (without mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.02	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.02	0.08	0.18	No
	National 1 hour, ppm	0.053	0.01	0.07	0.100	No
	Annual, ppm	0.015	0.005	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	1.6	1.6	2.5	No
	Annual, $\mu g/m^3$	NA	1.0	1.0	1.0	Yes
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.5	0.5	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.[2] Highest impacts generally occur at the existing residences within the project boundaries.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-16: Localized Assessment of Project Phase 1 and Phase 2 Full Build Out (2018) Emissions Maximum Impacts Outside the Project Boundaries (without mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.01	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.01	0.08	0.18	No
	National 1 hour, ppm	0.064	0.01	0.06	0.100	No
	Annual, ppm	0.015	0.002	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	0.8	0.8	2.5	No
	Annual, $\mu g/m^3$	NA	0.5	0.5	1.0	No
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.2	0.2	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.
[2] Highest impacts generally occur at the existing residences along Gilman Springs Road to the east of the project.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

It is important to note the Project Phase 1 (2018) and Project Phase 1 and Phase 2 Full Build Out (2018) conditions assume that the project's emissions are at the levels that would occur in 2018. The majority of the project's operational emissions are from on-road mobile sources, more particularly, heavy-duty trucks that contribute a disproportionate amount of emissions compared to passenger vehicles. Emissions from on-road mobile sources are regulated at the State and Federal levels and, therefore, are outside of the control of local agencies such as the City and the SCAQMD. For example, the CARB is working closely with the USEPA, engine and vehicle manufacturers, and other interested parties to identify programs that will reduce emissions from heavy-duty diesel vehicles in California. Emission reductions arise from a combination of measures including the use of ultra-low sulfur diesel fuel, new emission standards for large diesel engines, restrictions on diesel engine idling, addition of post-combustion filter and catalyst equipment, and retrofits for business and government diesel truck fleets. The implementation of these emission reductions will also result in reductions of other pollutants such as NO_X, VOC, and CO. As these emission reduction programs are implemented and there is a turnover in the use of older vehicles with newer and cleaner vehicles, the project's operational emissions are expected to decline significantly in the future. Emission controls on mobile source vehicles already adopted by the CARB particularly dealing with NO_X and PM_{10} controls on heavy duty trucks will reduce truck emissions significantly over time. As an example, in the South Coast Air Basin, the per-mile running exhaust rate of NO_X emissions from the largest category of heavy duty diesel trucks is estimated to decline from an average of 5.4 grams/mile in 2018 to 2.5 grams/mile by 2025, a decline of 53 percent from 2018 levels and to 2.22 grams/mile in 2040, a decrease of 59 percent from 2018 levels. Similarly, the per-mile running exhaust rate of PM_{10} emissions from the largest category of heavy duty diesel trucks is estimated to decline from an average of 0.09 gram/mile in 2018 to 0.020 gram/mile in 2025, a decline of 79 percent from 2018 levels and decline to 0.018 grams/mile in 2040, a decline of 81 percent from 2018 levels. Thus, two Project (2018) conditions represent highly conservative estimates, in terms of overestimating of the project's operational impacts.

Project Development Schedule LST Assessment

The final localized threshold assessment condition examined potential local project impacts considering the proposed construction and build out schedule of the project over a time period of 16 years from the commencement of construction in 2020 to the final build out in 2040. This condition examined three specific time periods:

- The year 2025: the earliest year Phase 1 is assumed to be fully operational. When the projected construction schedule would result in construction activities in the southern of the project adjacent to Alessandro Boulevard and east of the existing residential areas along Merwin Street and when all of Phase I operations would occur (approximately 57 percent of entire project floor space); These residences are the closest sensitive receptors outside of the project's boundaries. According to the conceptual construction schedule provided by the applicant, extensive building construction is expected to take place within the southern portion of the site, south of Alessandro Boulevard, as well on both sides of World Logistics Center Parkway during the completion of Phase 1 construction and the beginning of Phase 2 construction. This scenario also corresponds to the complete operations of Phase 1 and the attendant operational emissions. The project's onsite maximum daily and annual construction emissions were estimated using the CalEEMod land use emission model and the construction equipment inventory and activities provided by the applicant. The project's onsite operational emissions, principally from the project's mobile sources, were derived from detailed traffic volume data provided by the project's TIA that reflects a completely operational Phase 1. The TIA applied a comprehensive regional transportation model to develop daily and peak hour traffic volumes for 2025 and 2040 from the project's mobile sources. Peak hour and daily project traffic volumes were developed for each year from 2020 to buildout for roadway segments within and along the boundaries of the project using the following assumptions:
    - Project operational traffic volumes were assumed to be zero in 2020, the year that project construction would commence.

  - Traffic volumes for the years 2021 to 2025 (the completion year for Phase 1 operations) were interpolated from 2021 to 2025 by applying the annual project occupancy schedule to the 2025 traffic volumes.
  - Traffic volumes for the years 2025 to buildout were interpolated from the provided traffic volumes in 2025 and 2040 by applying the annual project occupancy schedule.
- The year 2032, when the project's total daily on-site construction and operational emissions would be the highest for several air pollutants and construction and operations would occur along the eastern portion of the project potentially impacting the existing residences across from the project along Gilman Springs Road; and
- The year 2040, which is the long term planning year analyzed in the TIA and representative of the complete build out of the project.

Localized Impact Analysis, 2025. The localized impacts for the short-term construction and operational activities were analyzed using an air dispersion model (EPA AERMOD Model) to simulate the transport and dispersion of project-related emissions through the air. These impacts were then compared to the applicable SCAQMD localized concentration thresholds.

The estimated maximum localized air quality impacts from the construction and operation of the project at Phase 1 buildout are summarized in Table 4.3-17 for locations within the project's boundaries. These maximum impacts were found at the locations of the existing residences within the project boundaries. Table 4.3-18 summarizes the highest air quality impacts for sensitive receptors located outside of the project boundaries. As noted from these two tables, project impacts would exceed the significance thresholds for PM_{10} for locations within the project boundaries, thus represents a significant impact without mitigation. Project impacts would not exceed localized thresholds for receptors located outside the project boundaries.

Table 4.3-17: Localized Assessment – Construction and Operation, Year 2025 Maximum Impacts Within the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background [1]	Air Concentration		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.05	2.2	20	No
	8 hour, ppm	1.6	0.02	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.03	0.09	0.18	No
	National 1 hour, ppm	0.053	0.02	0.08	0.100	No
	Annual, ppm	0.015	0.003	0.02	0.030	No
PM_{10}	24 hour, µg/m^3	NA	3.3	3.3	2.5[2]	Yes
	Annual, µg/m^3	NA	1.6	1.6	1.0	Yes
$PM_{2.5}$	24 hour, µg/m^3	NA	0.8	0.8	2.5[2]	No

µg/m^3 = micrograms per cubic meter (a concentration unit), ppm = parts per million (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.[2] During periods when both construction and operation overlap the SCAQMD recommends the operational significance thresholds for PM_{10} and $PM_{2.5}$ as opposed to the construction thresholds which are 10.4 ug/m^3 for PM_{10} and $PM_{2.5.}$ This provides a very conservative threshold for determining the significance of project impacts.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report,* 2018.

Localized Air Quality Impact Analysis, 2032. The year 2032 was selected for the LST Analysis for two principal reasons: 1) the year 2032 corresponds to the year with the highest combined total onsite construction and operational emissions of NO_x and CO and the third or fourth highest onsite emissions of PM_{10} and $PM_{2.5}$ during the time period of 2020 to 2035; and 2) the location of the building construction in 2032 places the construction emissions adjacent to the existing residences located on the eastern side of the project across Gilman Springs Road.

Table 4.3-18: Localized Assessment – Construction and Operation, Year 2025 Maximum Impacts Outside the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background [1]	Air Concentration		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.04	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.02	0.09	0.18	No
	National 1 hour, ppm	0.053	0.02	0.08	0.100	No
	Annual, ppm	0.015	0.001	0.02	0.030	No
PM_{10}	24 hour, µg/m^3	NA	2.1	2.1	2.5[2]	No
	Annual, µg/m^3	NA	0.7	0.7	1.0	No
$PM_{2.5}$	24 hour, µg/m^3	NA	0.5	0.5	2.5[2]	No

µg/m^3 = micrograms per cubic meter (a concentration unit), ppm = parts per million (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.[2] During periods when both construction and operation overlap the SCAQMD recommends the operational significance thresholds for PM_{10} and $PM_{2.5}$ as opposed to the construction thresholds which are 10.4 ug/m^3 for PM_{10} and $PM_{2.5}$. This provides a very conservative threshold for determining the significance of project impacts.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

The project's maximum combined impacts from construction and operations during 2032 are shown in Table 4.3-19 for the existing sensitive receptors located within the project boundaries along with the SCAQMD-recommended significance thresholds. Table 4.3-20 shows the maximum combined impacts for sensitive receptors located outside of the project boundaries. These latter impacts were found within the residential areas located to the east of the project across Gilman Springs Road. As shown in these tables, the project would exceed the SCAQMD's significance thresholds for PM_{10} at locations within the project boundary and outside of the project boundary.

Localized Air Quality Impact Analysis, 2040. The year 2040 represents a long-term planning year when both phases of the project would be fully in operation. Operational emissions during 2040 were estimated based on the project's trip generation and project-related travel along the local roadway network within and along the project boundaries. Table 4.3-21 shows the maximum localized air quality impacts for 2040 relative to the background air quality levels at the existing sensitive receptors located within the project boundaries. Table 4.3-22 identifies the highest localized impacts for sensitive receptors located outside of the project boundaries. As shown in Table 4.3-21 and Table 4.3-22, the project would exceed PM_{10} LSTs for receptors within and outside the project boundary, and would, therefore, represent a significant impact without mitigation.

Summary. The localized significance analysis demonstrates that without mitigation, the project would exceed the localized significance thresholds for PM_{10} for one or more of the LST assessment years (2025, 2032, or 2040) analyzed. Therefore, according to this criterion, the air pollutant emissions would

result in a significant impact and could exceed or contribute to an exceedance of the annual and 24-hour PM_{10} ambient air quality standards.

Table 4.3-19: Localized Assessment – Construction and Operation, Year 2032 Maximum Impacts Within the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.06	2.2	20	No
	8 hour, ppm	1.6	0.02	1.7	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.03	0.09	0.18	No
	National 1 hour, ppm	0.053	0.02	0.08	0.100	No
	Annual, ppm	0.015	0.003	0.02	0.030	No
PM_{10}	24 hour, µg/m^3	NA	3.9	3.9	2.5[3]	Yes
	Annual, µg/m^3	NA	1.7	1.7	1.0	Yes
$PM_{2.5}$	24 hour, µg/m^3	NA	0.9	0.9	2.5[3]	No

µg/m^3 = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.[2] Highest impacts at any receptor located outside of the boundaries of the project generally occur in the residential areas
to the east of the project across Gilman Springs Road
[3] During periods when both construction and operation overlap the SCAQMD recommends the operational significance thresholds for PM_{10} and $PM_{2.5}$ as opposed to the construction thresholds which are 10.4 ug/m^3 for PM_{10} and $PM_{2.5}$. This provides a very conservative threshold for determining the significance of project impacts.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-20: Localized Assessment – Construction and Operation, Year 2032 Maximum Impacts Outside the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration[2]		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.09	2.3	20	No
	8 hour, ppm	1.6	0.03	1.7	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.02	0.08	0.18	No
	National 1 hour, ppm	0.053	0.01	0.07	0.100	No
	Annual, ppm	0.015	0.001	0.02	0.030	No
PM_{10}	24 hour, µg/m^3	NA	4.7	4.7	2.5[3]	Yes
	Annual, µg/m^3	NA	1.5	1.5	1.0	Yes
$PM_{2.5}$	24 hour, µg/m^3	NA	0.9	0.9	2.5[3]	No

µg/m^3 = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.
[2] Highest impacts at any receptor located outside of the boundaries of the project generally occur in the residential areas to the east of the project across Gilman Springs Road
[3] During periods when both construction and operation overlap the SCAQMD recommends the operational significance thresholds for PM_{10} and $PM_{2.5}$ as opposed to the construction thresholds which are 10.4 ug/m^3 for PM_{10} and $PM_{2.5}$. This provides a very conservative threshold for determining the significance of project impacts.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-21: Localized Assessment – Project Operation Full Build Out, Year 2040 Maximum Impacts Within the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.01	2.2	20	No
	8 hour, ppm	1.6	0.009	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.009	0.07	0.18	No
	National 1 hour, ppm	0.053	0.008	0.06	0.100	No
	Annual, ppm	0.015	0.003	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	2.9	2.9	2.5	Yes
	Annual, $\mu g/m^3$	NA	1.8	1.8	1.0	Yes
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.8	0.8	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-22: Localized Assessment – Project Operation, Year 2040 Maximum Impacts Outside of the Project Boundaries (without Mitigation)

Pollutant	Averaging Time, Units	Existing Background[1]	Air Concentration		Standard/ Threshold	Total Impact Exceeds Threshold?
			Project Local Increase	Total (Background + Project)		
Carbon Monoxide	1 hour, ppm	2.2	0.01	2.2	20	No
	8 hour, ppm	1.6	0.01	1.6	9.0	No
Nitrogen Dioxide	State 1 hour, ppm	0.064	0.006	0.07	0.18	No
	National 1 hour, ppm	0.053	0.006	0.06	0.100	No
	Annual, ppm	0.015	0.001	0.02	0.030	No
PM_{10}	24 hour, $\mu g/m^3$	NA	2.2	2.2	2.5	No
	Annual, $\mu g/m^3$	NA	1.3	1.3	1.0	Yes
$PM_{2.5}$	24 hour, $\mu g/m^3$	NA	0.6	0.6	2.5	No

$\mu g/m^3$ = micrograms per cubic meter (a concentration unit)
NA = Not Applicable, the SCAQMD threshold methodology does not require a background for PM_{10} or $PM_{2.5}$
[1] Background data for CO and nitrogen dioxide derived as the highest air quality measured data over a 3-year rolling average from 2014-2017.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Mitigation Measures. Mitigation measures identified previously under Impact 4.3.6.2 (**Mitigation Measures 4.3.6.2A**, **4.3.6.2B**, and **4.3.6.2D**) to reduce construction emissions of criteria pollutants are required. The project will also be required to comply with SCAQMD Rules 402 and 403. Additionally, the following mitigation measures are required to reduce emissions of criteria pollutants during project operations.

4.3.6.3A Prior to issuance of occupancy permits for each warehouse building within the WLCSP, the developer shall demonstrate to the City that vehicles can access the building using paved roads and parking lots.

4.3.6.3B The following shall be implemented as indicated:

Prior to Issuance of a Certificate of Occupancy

a) Signs shall be prominently displayed informing truck drivers about the California Air Resources Board diesel idling regulations, and the prohibition of parking in residential areas.

b) Signs shall be prominently displayed in all dock and delivery areas advising of the following: engines shall be turned off when not in use; trucks shall not idle for more than three consecutive minutes; telephone numbers of the building facilities manager and the California Air Resources Board to report air quality violations.

c) Signs shall be installed at each exit driveway providing directional information to the City's truck route. Text on the sign shall read "To Truck Route" with a directional arrow. Truck routes shall be clearly marked per the City Municipal Code.

On an Ongoing Basis

d) Tenants shall maintain records on fleet equipment and vehicle engine maintenance to ensure that equipment and vehicles are maintained pursuant to manufacturer's specifications. The records shall be maintained on site and be made available for inspection by the City.

e) Tenant's staff in charge of keeping vehicle records shall be trained/certified in diesel technologies, by attending California Air Resources Board approved courses (such as the free, one-day Course #512). Documentation of said training shall be maintained on-site and be available for inspection by the City.

f) Tenants shall be encouraged to become a SmartWay Partner.

g) Tenants shall be encouraged to utilize SmartWay 1.0 or greater carriers.

h) Tenants' fleets shall be in compliance with all current air quality regulations for on-road trucks including but not limited to California Air Resources Board's Heavy-Duty Greenhouse Gas Regulation and Truck and Bus Regulation.

i) Information shall be posted in a prominent location available to truck drivers regarding alternative fueling technologies and the availability of such fuels in the immediate area of the World Logistics Center.

j) Tenants shall be encouraged to apply for incentive funding (such as the Voucher Incentive Program [VIP], Carl Moyer, etc.) to upgrade their fleet.

k) All yard trucks (yard dogs/yard goats/yard jockeys/yard hostlers) shall be powered by electricity, natural gas, propane, or an equivalent non-diesel fuel. Any off-road engines in the yard trucks shall have emissions standards equal to Tier 4 Interim or greater. Any on-road engines in the yard trucks shall have emissions standards that meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025.

l) All diesel trucks entering logistics sites shall meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025 or be powered by natural gas, electricity, or other diesel alternative. Facility operators shall maintain a log of all trucks entering the facility to document that the truck usage meets these emission standards. This log shall be available for inspection by City staff at any time.

m) All standby emergency generators shall be fueled by natural gas, propane, or any non-diesel fuel.

n) Truck and vehicle idling shall be limited to three (3) minutes.

4.3.6.3C Prior to the issuance of building permits for more than 25 million square feet of logistics warehousing within the Specific Plan area, a publically-accessible fueling station shall be operational within the Specific Plan area offering alternative fuels (natural gas, electricity, etc.) for purchase by the motoring public. Any fueling station shall be placed a minimum of 1000 feet from any off-site sensitive receptors or off-site zoned sensitive uses. This facility may be established in connection with the convenience store required in Mitigation Measure 4.3.6.3D.

4.3.6.3D Prior to the issuance of building permits for more than 25 million square feet of logistics warehousing within the Specific Plan area a site shall be operational within the Specific Plan area offering food and convenience items for purchase by the motoring public. This facility may be established in connection with the fueling station required in Mitigation Measure 4.3.6.3C.

4.3.6.3E Refrigerated warehouse space is prohibited unless it can be demonstrated that the environmental impacts resulting from the inclusion of refrigerated space and its associated facilities, including, but not limited to, refrigeration units in vehicles serving the logistics warehouse, do not exceed any environmental impact for the entire World Logistics Center identified in the Revised Sections of the FEIR. Such environmental analysis shall be provided with any warehouse plot plan proposing refrigerated space. Any such proposal shall include electrical hookups at dock doors to provide power for vehicles equipped with Transportation Refrigeration Units (TRUs).

Level of Significance After Mitigation. Significant and unavoidable. Table 4.3-23 compares the project impacts before and after mitigation for those assessment conditions and pollutants that indicated a significant impact before mitigation. After application of mitigation, the project would continue to exceed the localized significance thresholds at one or more of the existing residences located within the project boundaries for PM_{10} (24-hour and annual). In addition, the project would continue to exceed the localized significance thresholds at offsite receptors for PM_{10} (24-hour and annual).

In summary, those residents inside and outside the project boundaries could be exposed to significant short-term and long-term PM_{10} concentrations on an ongoing basis. The health effects from particulate matter were discussed earlier and could include the following:

- Particulate matter can cause the following health effects from short-term (24-hour) exposure: irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; and/or those with heart disease can suffer heart attacks and arrhythmias.
- Particulate matter can cause the following health effects from long-term exposure (annual): reduced lung function; chronic bronchitis; changes in lung morphology; and/or death.

Table 4.3-23: Comparison of Local Project Air Quality Impacts Before and After Mitigation

Assessment Condition	Location	Pollutant, Averaging Time, Units	Total Impact Before Mitigation[(1)]	Total Impact After Mitigation	Significance Threshold	Exceeds Threshold After Mitigation?
Project Phase 1 and Phase 2 Full Build Out (2018)	Inside Project Boundaries	PM_{10}, Annual, $\mu g/m^3$	1.02	0.97	1.0	No
Project Development Schedule Year 2025	Inside Project Boundaries	PM_{10} 24-hour, $\mu g/m^3$	3.30	3.23	2.5	Yes
		PM_{10}, Annual, $\mu g/m^3$	1.57	1.56	1.0	Yes
Project Development Schedule Year 2032	Inside Project Boundaries	PM_{10} 24-hour, $\mu g/m^3$	3.90	3.89	2.5	Yes
		PM_{10} Annual, $\mu g/m^3$	1.7	1.7	1.0	Yes
	Outside Project Boundaries	PM_{10} 24-hour, $\mu g/m^3$	4.7	4.6	2.5	Yes
		PM_{10} Annual, $\mu g/m^3$	1.5	1.4	1.0	Yes
Project Development Schedule Year 2040 Build Out	Inside Project Boundaries	PM_{10} 24 hour, $\mu g/m^3$	2.9	2.9	2.5	Yes
		PM_{10} Annual, $\mu g/m^3$	1.8	1.8	1.0	Yes
	Outside Project Boundaries	PM_{10} Annual, $\mu g/m^3$	1.3	1.3	1.0	Yes

Notes: $\mu g/m^3$ = micrograms per cubic meter (a unit of concentration); ppm = parts per million (a unit of concentration)

(1) Total Impacts include the incremental impacts from the project plus the pollutant background; see Tables 4.3-13 to 4.3-22 for the total impacts for the various assessment conditions prior to the application of mitigation.

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

4.3.6.4 Long-Term Operational Emissions

Impact 4.3.6.4: *Implementation of the World Logistics Center project may have the potential to exceed applicable daily thresholds for operational activities.*

Threshold	Would the proposed project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? For long-term operations, the applicable daily thresholds are: - 55 pounds of VOC; - 55 pounds of NO_X; - 550 pounds of CO; - 150 pounds of PM_{10}; - 55 pounds of $PM_{2.5}$; and - 150 pounds of SO_X.

Long-term air pollutant emission impacts that would result from the World Logistics Center project are those associated with stationary sources (generators, boilers, etc.), area sources (landscaping and maintenance activities), and mobile sources (e.g., emissions from the use of motor vehicles by project-generated traffic). As discussed above in Section 4.3.3.2, the TIA provides VMT attributable to the project based on the net effect the project would have on regional travel as well as project VMT without consideration of a net effect. The emissions from the net effect on VMT, in conjunction with the proposed stationary and area sources, are shown in the tables below for determination of significance. For informational purposes only the *Air Quality, Greenhouse Gas, and Health Risk Assessment Report (*Appendix A*)* of this revised section of the FEIR includes operational mobile emissions without consideration of a net effect in regional traffic volumes.

Worst-Case Scenario. Projected emissions resulting from operational activities of the project under the worst-case scenario are identified in Table 4.3-24.

There may be minor emissions of VOC from the fueling station, depending on what type of fuel is used. However, details regarding the fueling station are currently unknown so the emission source is not estimated. This is a worst-case analysis because it assumes that the entire project would be built-out in 2018. The motor vehicle and truck emission factors are from 2018, which assumes a "dirtier" fleet than would be the case in later years. In addition, no reductions are taken for mitigation measures.

Table 4.3-24: Operational Regional Air Pollutant Emissions (Worst-Case Scenario)

Scenario	Source	Emissions (pounds per day)				
		VOC	NO_X	CO	PM_{10}	$PM_{2.5}$
Phase 1 2018 emission factors	Mobile	107	2,078	579	386	116
	Area	175	<1	2	<1	<1
	Onsite equipment	5	138	51	1	1
	Total	**287**	**2,216**	**632**	**388**	**117**
Buildout 2018 emission factors	Mobile	241	3,958	1,472	898	274
	Area	311	<1	4	<1	<1
	Onsite equipment	9	245	89	2	2
	Total	**561**	**4,202**	**1,565**	**901**	**276**
Significance Threshold		55	55	550	150	55
Significant Impact?		Yes	Yes	Yes	Yes	Yes

Notes: VOC = volatile organic compounds; NOx = nitrogen oxides; CO = carbon monoxide
PM_{10} and $PM_{2.5}$ = particulate matter <1 = less than one
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

As identified in Table 4.3-24, operational emissions for the project would exceed SCAQMD daily operational thresholds for all criteria pollutants with the exception of SO_X for the "worst-case" 2018 scenario.

Operational Regional Emissions. Table 4.3-25 shows the detailed operational emission sources generated both on site and off site for Phase 1 and buildout. The table shows particulate matter (PM_{10} and $PM_{2.5}$) divided into dust and exhaust sources. As shown in the table, emissions of VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ are significant after completion of Phase 1 and after full buildout.

Table 4.3-26 shows the operational emissions year by year using future year emission factors. The VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ emissions would be over the SCAQMD's significance thresholds for most years beginning as early as year 2021 for NO_X, 2023 for VOC, 2024 for PM_{10} and $PM_{2.5}$, and 2029 for CO. The emissions demonstrate that although the number of vehicles and trucks would increase year by year, the emissions do not increase dramatically because the per-vehicle emission factors decrease over time as cleaner vehicles enter the fleet over time.

Combined Construction and Operation. There would be overlapping of construction and operational emissions with project implementation. The maximum daily operational emissions were added to the maximum daily construction emissions and are shown in Table 4.3-27, which shows all pollutants for all years exceed the SCAQMD thresholds, with the exception of SO_X emissions. SO_X are not shown in the table as they are far below the significance threshold of 150 pounds per day.

As identified in the preceding tables, project-related air quality impacts for all criteria pollutants, with the exception of SO_X, would be significant and mitigation measures are required.

Table 4.3-25: Operational Regional Air Pollutant Emissions (Detail, Unmitigated)

Phase	Source	Emissions (pounds/day)								
		VOC	NO_X	CO	PM_{10} Dust	PM_{10} Exh.	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exh.	$PM_{2.5}$ Total
Phase 1	Mobile	57	607	322	313	5	318	85	3	88
	Area	175	<1	2	0	<1	<1	0	<1	<1
	On-site Equipment	5	138	51	0	1	1	0	1	1
	Total	**238**	**746**	**375**	**313**	**6**	**319**	**85**	**4**	**89**
Buildout	Mobile	103	803	772	940	5	945	252	5	256
	Area	311	<1	4	0	<1	<1	0	<1	<1
	On-site Equipment	9	245	89	0	2	2	0	2	2
	Total	**422**	**1,047**	**865**	**940**	**7**	**947**	**252**	**7**	**259**
Significance Threshold		55	55	550	None	None	150	None	None	55
Significant Impact?		Yes	Yes	Yes	--	--	Yes	--	--	Yes

Notes: VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter Exh. = exhaust <1 = less than 1

On-site equipment emissions include emissions from yard trucks, forklifts, and stationary generators.

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-26: Operational Regional Air Pollutant Emissions (Year by Year, pounds per day, unmitigated)

Year	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2020	0	0	0	*	0	0
2021	25	98	50	*	44	12
2022	49	195	100	*	89	25
2023	82	326	166	*	148	41
2024	115	456	233	*	207	58
2025	175	698	356	*	317	89
2026	226	769	460	*	445	123
2027	252	806	514	*	513	141
2028	268	829	547	*	553	152
2029	284	851	580	*	594	163
2030	307	884	627	*	652	179
2031	332	920	680	*	718	197
2032	358	957	733	*	784	214
2033	384	993	786	*	849	232
2034	401	1,017	821	*	893	244
2035	418	1,041	856	*	936	256
Buildout	422	1,047	865		947	259
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

- Emissions are from local vehicles, trucks, natural gas, emergency generators, forklifts, yard trucks, painting, and consumer products. There is no reduction from existing onsite emissions.
- Operational emissions are assumed to be zero in 2020 when project construction commences.
- PM_{10} and $PM_{2.5}$ emissions include exhaust and road dust.
- Landscaping emissions are negligible.

* Sulfur dioxide emissions as estimated are substantially less than the threshold of 150 pounds per day. Thus, emissions reflecting decreased vehicle miles traveled would also be less than significant.

VOC = volatile organic compounds; NO_X = nitrogen oxides; SO_2 = sulfur dioxide; CO = carbon monoxide; PM_{10} and $PM_{2.5}$ = particulate matter

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-27: Combined Construction and Operational Regional Air Pollutant Emissions (Year by Year, pounds per day, unmitigated)

Year	VOC	NO_X	CO	PM_{10}	$PM_{2.5}$
2020 (construction only)	281	639	407	124	34
2021	294	557	484	161	42
2022	347	972	745	251	68
2023	344	673	585	259	65
2024	457	1,688	1,225	431	121
2025	438	1,040	813	434	112
2026	507	1,304	1,055	608	158
2027	521	1,221	990	642	168
2028	564	1,519	1,210	718	192
2029	565	1,395	1,140	739	196
2030	616	1,274	1,231	792	205
2031	601	1,127	1,107	820	213
2032	666	1,347	1,349	926	241
2033	681	1,333	1,351	985	256
2034	669	1,223	1,247	995	260
2035	699	1,278	1,367	1,058	274
Buildout (operation only)	422	1,047	865	947	259
Max Daily Emissions	**699**	**1,688**	**1,367**	**1,058**	**274**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

- Year 2020 contains construction emissions only; buildout contains operational emissions only
- Sulfur oxide (SOx) emissions are substantially under the threshold of 150 pounds per day
- Reduction from existing onsite emissions are not included.

VOC = volatile organic compounds; NO_X = nitrogen oxides; CO = carbon monoxide; PM_{10} and $PM_{2.5}$ = particulate matter
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Mitigation Measures. The mitigation measures previously identified under Impact 4.3.6.3 (**Mitigation Measures 4.3.6.3A** through **4.3.6.3E**) would reduce operational emissions of criteria pollutants associated with the project

Additionally, the following mitigation measure is required:

4.3.6.4A The following measures shall be incorporated as conditions to any Plot Plan approval within the Specific Plan:

a) All tenants shall be required to participate in Riverside County's Rideshare Program.

b) Storage lockers shall be provided in each building for a minimum of three percent of the full-time equivalent employees based on a ratio of 0.50 employees per 1,000 square feet of building area. Lockers shall be located in proximity to required bicycle storage facilities.

c) Class II bike lanes shall be incorporated into the design for all project streets.

d) The project shall incorporate pedestrian pathways between on-site uses.

e) Site design and building placement shall provide pedestrian connections between internal and external facilities.

f) The project shall provide pedestrian connections to residential uses within 0.25 mile from the project site.

g) A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building. In addition, parking facilities with 200 parking spaces or more shall be designed and constructed so that at least six percent of the total parking spaces are capable of supporting future electric vehicle supply equipment (EVSE) charging locations. Sizing of conduit and service capacity at the time of construction shall be sufficient to install Level 2 Electric Vehicle Supply Equipment (EVSE) or greater.

h) Each building shall provide indoor and/or outdoor - bicycle storage space consistent with the City Municipal Code and the California Green Building Standards Code. Each building shall provide a minimum of two shower and changing facilities for employees.

i) Each building shall provide preferred and designated parking for any combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles equivalent to the number identified in California Green Building Standards Code Section 5.106.5.2 or the Moreno Valley Municipal Code whichever requires the higher number of carpool/vanpool stalls.

j) The following information shall be provided to tenants: onsite electric vehicle charging locations and instructions, bicycle parking, shower facilities, transit availability and the schedules, telecommunicating benefits, alternative work schedule benefits, and energy efficiency.

It is important to note that, in addition to the operational activity mitigation measures identified previously, future development would need to incorporate physical attributes and operational programs that will act to generally reduce operational-source pollutant emissions including GHG emissions. These project characteristics are identified in Section 4.7, *Climate Change and Greenhouse Gas Emissions*, and Section 4.17, *Energy,* of this revised FEIR.

Level of Significance after Mitigation. Significant and unavoidable. Mitigated operational emissions for full buildout are shown in Table 4.3-28. Note that the emissions are based on conservative assumptions and does not subtract existing emissions that would cease to exist (i.e., assumes all emissions are net new). As shown on Table 4.3-28, even with implementation of the mitigation measures, emissions are still significant. Despite implementation of mitigation measures, emissions of criteria pollutants would still exceed SCAQMD significance thresholds resulting in a significant and unavoidable operational air quality impact.

Table 4.3-28: Operational Regional Air Pollutant Emissions (Mitigated)

Scenario	Source	Emissions (pounds per day)				
		VOC	NO_X	CO	PM_{10}	$PM_{2.5}$
Buildout	Vehicles: Local and trucks	97	802	773	945	256
	Area	311	<1	4	<1	<1
	Onsite Equipment	8	91	107	<1	<1
	Total Project Emissions	**416**	**893**	**883**	**946**	**257**
	Significance Threshold	55	55	550	150	55
	Significant Impact?	Yes	Yes	Yes	Yes	Yes

- PM_{10} and $PM_{2.5}$ emissions include exhaust and road dust.
- Landscaping emissions are negligible.
- Sulfur oxides emissions are under the 150 pounds per day significance threshold and at buildout would be less than 23 pounds per day.

VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
On-site equipment emissions include emissions from yard trucks, forklifts, and stationary generators.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Therefore, there could be cumulative health effects from ozone, PM_{10}, and $PM_{2.5}$ as described earlier in this section and summarized as follows:

- Ozone can cause the following health effects: irritate respiratory system; reduce lung function; breathing pattern changes; reduce breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; and/or increase mortality risk.
- Particulate matter (PM_{10} and $PM_{2.5}$) can cause the following health effects from short-term (hours/days) exposure: irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; and/or those with heart disease can suffer heart attacks and arrhythmias.
- Particulate matter can cause the following health effects from long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; and/or death.

During overlap of construction and operation, VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ would continue to exceed SCAQMD significance thresholds after mitigation, as shown in Table 4.3-29. Therefore, impacts are significant and unavoidable.

Table 4.3-29: Combined Construction and Operational Regional Air Pollutant Emissions (Year by Year, pounds per day) – Mitigated

Year	VOC	NO_X	CO	PM_{10}	$PM_{2.5}$
2020	149	178	452	4	3
2021	176	261	542	48	16
2022	214	367	839	93	29
2023	231	420	651	150	44
2024	281	625	1,363	211	62
2025	324	736	887	319	90
2026	379	827	1,176	447	125
2027	400	831	1,083	514	143
2028	422	881	1,352	556	155
2029	434	884	1,259	596	165
2030	463	914	1,441	654	181
2031	479	906	1,179	718	197
2032	513	978	1,548	785	216
2033	536	999	1,523	851	233
2034	546	988	1,326	893	244
2035	566	1,020	1,510	936	256
Buildout	416	893	883	946	257
Max Daily Emissions	**566**	**1,020**	**1,548**	**946**	**257**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

- Year 2020 contains construction emissions only; buildout contains operational emissions only
- Sulfur oxide (SOx) emissions are substantially under the threshold of 150 pounds per day.
- Emissions do not include existing onsite emissions.

VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide PM_{10} and $PM_{2.5}$ = particulate matter
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018

4.3.6.5 Impacts to Sensitive Receptors

Impact 4.3.6.5: *Implementation of the World Logistics Center project may have the potential to result in impacts to sensitive receptors.*

Threshold	Would the proposed project expose sensitive receptors to substantial pollutant concentrations? For localized air quality impacts, the applicable thresholds are: - 20 ppm (1 hour) and 9 ppm (8 hours) of CO during construction and operation; - 0.18 ppm (State 1 hour), 0.100 ppm National 1 hour), and 0.030 ppm (Annual) of NO_X during construction and operation; - 10.4 µg/m^3 (24-hours) and 1 µg/m^3 (Annual) of PM_{10} during construction - 2.5 µg/m^3 (24 hours) and 1.0 µg/m^3 (Annual) of PM_{10} during operations; and - 2.5 µg/m^3 (24 hours) of $PM_{2.5}$ during operations. - During time periods when construction and operational activities occur at the same time, the SCAQMD recommends application of the significance threshold for operations. For health risk impacts, the applicable thresholds are:

- Maximum Individual Cancer Risk: An increased cancer risk greater than 10 in 1 million at any receptor location;
- Cancer burden: An increase in cancer burden of 0.5 or
- Non-cancer chronic hazard indices (HI): A cumulative increase for any target organ system exceeding 1.0 at any receptor location.

Acute and Chronic Health Risk Impacts. Acute and chronic health risk impact analyses examine the increased risk for non-cancer health outcomes associated with project-related air pollutant emissions. Since these are non-cancer health impacts, as described below, the impacts are analyzed separately from increased cancer risk associated with air pollution.

The construction and operation of the project would not emit any toxic chemicals in any significant quantity other than vehicle exhaust. While there may be other toxic substances in use on site, risk would be negligible due to intermittent use (i.e., chemicals from periodic maintenance), dispersion of chemicals throughout the project site, and compliance with State and Federal handling regulations.

Exposure to diesel exhaust can have immediate (acute) health effects, such as irritation of the eyes, nose, throat, and lungs, and can cause coughs, headaches, light headedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. However, according to the rulemaking on *Identifying Particulate Emissions from Diesel-Fueled Engines as a Toxic Air Contaminant* (CARB 1998), the available data from studies of humans exposed to diesel exhaust are not sufficient for deriving an acute non-cancer REL.

The analysis, however, does derive an estimate of acute non-cancer risks by examining the acute health effects of the various toxic components that comprise diesel and gasoline emissions. There is specific guidance for estimating the acute non-cancer hazards from these toxic components based on chemical profiles established by the CARB which was used in the analysis to determine the project's acute non-cancer hazards.

To determine the project's *chronic* non-cancer hazard impact, the highest annual diesel PM concentration was determined covering the years 2020 (the commencement of project construction) to 2035 (the full build out of the project). In this regard, the highest annual average diesel PM concentration prior to mitigation determined through air dispersion modeling was 0.2 ug/m^3, at an existing residence located within the project boundaries. This diesel PM concentration was due to the impacts of diesel PM emissions from the off-road construction equipment and operation equipment. This level of diesel PM impact results in a chronic non-cancer HI of 0.04. This HI is less than the SCAQMD's significance level of 1.0, and is, therefore, less than significant.

The estimation of the *acute* non-cancer HI requires the estimation of the maximum 1-hour impacts of TAC components in organic gases and PM emissions. For project construction, estimates of the maximum 1-hour ROG and PM exhaust emissions were derived from the project's peak daily construction equipment emissions; for project operation, estimates of the project's maximum 1-hour TOG and PM emissions were derived from the project's peak hour traffic data along the nearly 230 roadway segments contained within the study area and then speciated or broken down into the various TAC components by fuel type, gasoline and diesel, and emission type (i.e., exhaust, evaporative, brake wear and tire wear). The acute non-cancer HI was determined for a worst-case condition that assumed the project would be constructed between 2020 and 2035 and full operation starts in 2040. Based on this information, the maximum acute non-cancer HI found at any receptor within the model domain prior to mitigation was 0.16 during project construction and 0.05 during full project operation, which are less than the SCAQMD's non-cancer HI of 1.0, and, therefore, is less than significant without mitigation.

Therefore, the potential for short-term acute and chronic exposure from diesel exhaust are considered to be less than significant and no mitigation is required.

Cancer Risks. As noted in Section 4.3.3, *Methodology*, the project health risk assessment examined the following condition for impacts to both sensitive/residential and worker receptors:

> *Project Development condition which evaluates the impacts of project-related construction and operational traffic diesel PM emissions as if the project were built out in accordance with its proposed phased construction and operational buildout schedule commencing with the construction of Phase 1 in 2020 and the full build out in 2035.*

This HRA is being provided to allow decision makers to see the cancer-related impacts of the World Logistics Center project in the assumption that new technology diesel exhaust causes cancer, contrary to what was found by the HEI study. The mitigation conditions require that all diesel-fueled haul trucks during construction be 2010 or newer, diesel trucks accessing the project during operation be model year 2010 or newer, and that all on-site equipment greater than 50 horsepower be Tier 4 (see MM 4.3.6.2A[h] and MM 4.3.6.2A[a], respectively).

To be conservative, the HRA relied on EMFAC2014 to determine the breakdown of vehicle types and fuel types and did not consider the potential reductions in TACs emissions and health risks from increased penetration of zero emission vehicles (ZEVs). The increased penetration of ZEVs is speculative, but likely given rapid technology advancement and more stringent legislation. For example, this HRA assumed that the 2040 heavy duty truck fleet would be made up of 94% diesel, 6% gasoline and 0% electric. According to the WLC Transportation Energy Technical Report (ESA, 2018), a High EV Penetration scenario projects that the heavy duty truck fleet would consist of 55.7% diesel, 4.3% gasoline, and 40% electric. Therefore, accounting for the High EV Penetration scenario would result in a greatly reduced health risk impact than what has been calculated in this analysis.

Localized Risk

Cancer Risk for Sensitive/Residential Receptors. For reference, a risk level of 1 in a million implies a likelihood that up to one person, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration of diesel PM over the duration of the exposure. This risk would be an excess cancer risk that is in addition to any cancer risk borne by a person not exposed to these air toxics (USEPA, 2017).

Table 4.3-30 presents the estimated cancer risks for the 30-year exposure scenario that starts from the beginning of project construction (Construction + Operation HRA), which uses updated construction and operational emissions values. The results are provided separately for project construction diesel PM emissions, operational diesel PM emissions, and the total project diesel PM emissions prior to the application of emission mitigation. Table 4.3-31 shows the estimated cancer risk for the 30-year residential exposure scenario that starts from the beginning of project full operation in 2040 (Operational HRA), which used the 2040 emission levels to represent the emissions for 2040 to 2069.

On the basis of the results shown in Table 4.3-30, the project would exceed the SCAQMD's cancer risk significance threshold of an incremental increase of 10 in a million prior to the application of mitigation and would represent a significant impact. Construction impacts contribute the greatest proportion of the total impact presented in Table 4.3-30. Table 4.3-31 shows that during full project operation, the estimated maximum cancer risk anywhere in the model domain is less than the 10 in a million threshold, impact will therefore be less than significant without mitigation. Overall, without mitigation, the project is expected to have a significant impact mainly due to diesel PM emissions from construction activities.

Figures 4.4-3 and 4.3-4 show the incremental cancer risks for the project location. The figures show the results prior to the application of mitigation.

Estimates of Cancer Risk for School Site Receptors. Cancer risk estimates at school sites in the area are provided in Appendix D. Prior to the application of the mitigation, the maximum cancer risk is at Ridgecrest Elementary School and would be less than 2 in a million. Therefore, impacts at schools are less than the 10 in one million significance threshold prior to mitigation and are less than significant.

Estimates of Cancer Risk for Worker Receptors. Estimates of worker exposures were prepared based on the assumption of a 25-year exposure duration for 250 days per year and 8 hours per day as described in the methodology section above. Note that the OEHHA early-in-life age factors do not apply to worker receptors. The highest worker cancer risk estimates prior to the application of mitigation is less than 5 in one million for the construction + operational scenario and 0.6 in one million for the full operational scenario, both at one onsite location. Therefore, cancer risk for worker receptors anywhere in the revised HRA's study area is less than the 10 in one million significance threshold. Projected impacts are less than significant without mitigation.

This analysis is based on the assumption that new technology diesel exhaust cause cancer, contrary to what was found by the HEI study and discussed in more detail below.

Estimates of Cancer Burden. The cancer burden calculation provides an estimate of the increased number of cancer cases as a result of exposures to TAC emissions. The total cancer burden is the product of the number of persons in a population area (such as a census tract) and the estimated individual risk from TACs in that population area and then summed overall population areas. The SCAQMD indicates that the burden calculation includes those population units having an incremental cancer risk of 1 in a million or greater.

Cancer risks were estimated at the geographical center (centroid) of census tracts that are within the study area of the HRA. For the 30-year exposure duration in accordance with "Current OEHHA Guidance", the cancer burden is estimated to be 0.09 out of a population of about 63,090 individuals that were estimated to have a cancer risk of 1 in a million or more. The SCAQMD has established a threshold for cancer burden of 0.5. Therefore, the project would not exceed the SCAQMD's cancer burden significance threshold prior to the application of mitigation.

Table 4.3-30: Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Construction (Construction and Operation HRA), Without Mitigation

Receptor Location	Incremental Increase in Cancer Risk During Project Construction (risk/million)	Incremental Increase in Cancer Risk During Project Operation (risk/million)	Total Incremental Increase in Cancer Risk[(1)] (risk/million)	SCAQMD Cancer Risk Significance Threshold (risk/million)	Exceeds Threshold?
Maximum risk anywhere in the modeling domain[(2)]	54.1	3.9	57.5	10	Yes
Maximum risk within the project boundaries[(3)]	54.1	3.9	57.5	10	Yes
Maximum risk at any area outside of the project boundaries[(4)]	14.9	1.1	16.0	10	Yes

Notes:
(1) Conservatively assumed all receptors in the studied domain are residential receptors and will have 30-year average exposures from 2020 to 2049 (includes diesel PM emissions from construction and operation); cancer risk estimates derived from the updated construction emission estimate, TIA, EMFAC2014 emission model, SCAQMD HRA guidance and "Current OEHHA Guidance" for estimating cancer risks
(2) Location is at the existing residences within the boundaries of the project
(3) Location is at the existing residence located at the 13241 World Logistic Parkway (formerly Theodore Street)
(4) Location is adjacent to the midwestern boundary of the project
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-31: Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Full Operation in 2040, Without Mitigation

Receptor Location	Total Incremental Increase in Cancer Risk[1] (risk/million)	SCAQMD Cancer Risk Significance Threshold (risk/million)	Exceeds Threshold?
Maximum risk anywhere in the modeling domain[2]	7.9	10	No
Maximum risk within the project boundaries[3]	7.9	10	No
Maximum risk at any area outside of the project boundaries[4]	3.4	10	No
Maximum risk along SR 60 freeway[5]	3.4	10	No

Notes:
[1] Conservatively assumed all receptors in the studied domain are residential receptors and will have 30-year average exposures from 2040 to 2069 (includes diesel PM emissions from full project operation); cancer risk estimates derived from the TIA, EMFAC2014 emission model, SCAQMD HRA guidance and "Current OEHHA Guidance" for estimating cancer risks
[2] Location is at the existing residences within the boundaries of the project.
[3] Location is at the existing residence located at 30220 Dracaea Avenue.
[4] Location is to the northwest of the project boundary, on the west side of Redlands Boulevard and north of Fir Avenue.
[5] Location is south of SR 60 freeway, same as the location in footnote (4), which to the northwest of the project boundary, on the west side of Redlands Boulevard and north of Fir Avenue.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

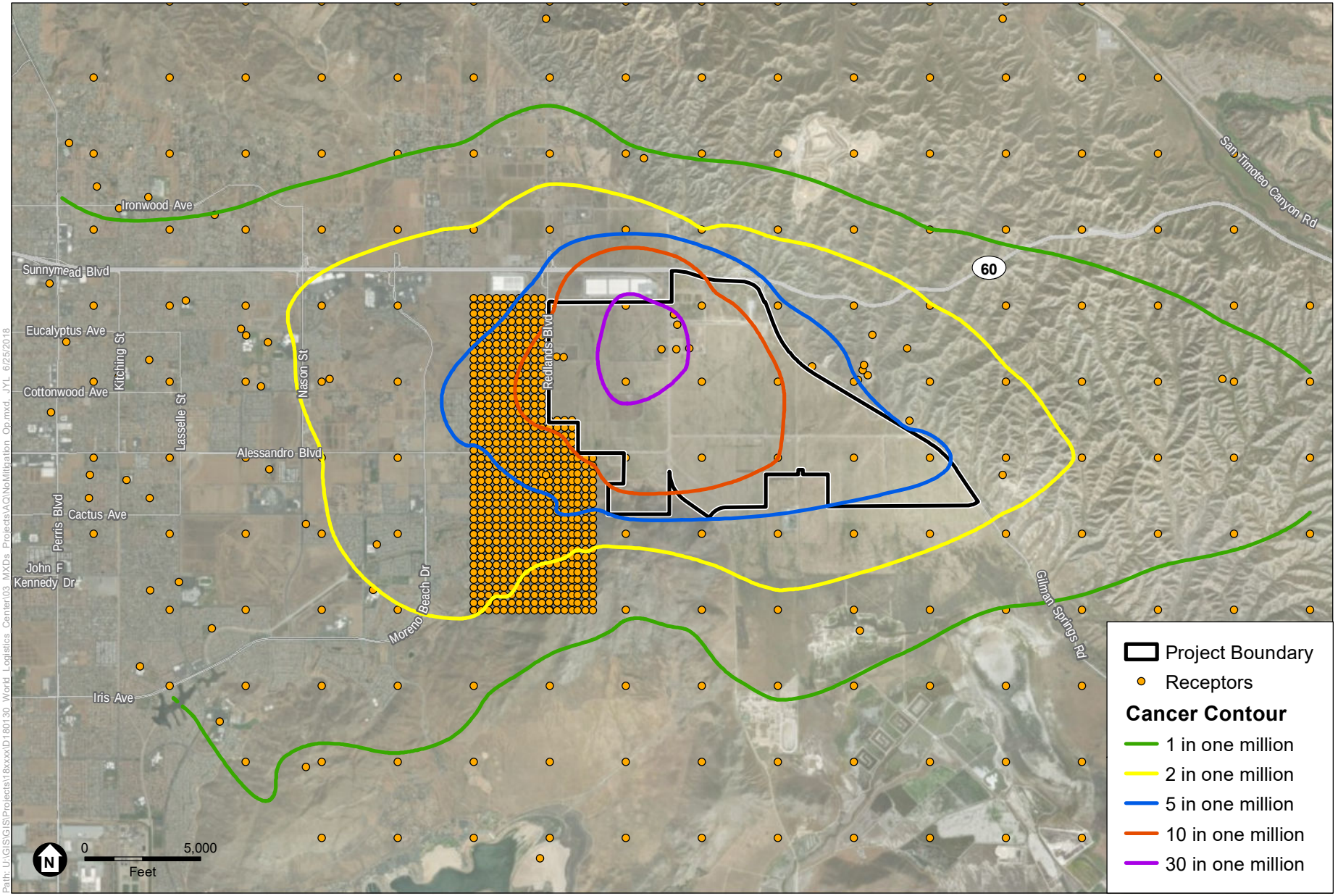
Regional Freeway Network Risk

As mentioned in the methodology section, the HRA study area was focused on the most extensive emissions from project related activities. Because project activity is highest on-site, the project's emissions and associated health impact decreases with an increase in distance from the project site, as demonstrated by the cancer risk contours in Figures 4.3-3 and 4.3-4. The HRA study area included approximately 18 miles of freeway segments along SR60 that extend from north of the project boundary 8.6 miles toward west (toward Port of Long Beach) and 9 miles toward east (toward Palm Springs), and the HRA receptor grids include receptors along the SR-60 freeway. Based on the results shown in Figure 4.3-3 for the construction plus operation scenario, without mitigation, only a small segment (approximately one mile) along SR-60 that is immediately north of the project boundary will potentially have an incremental cancer risk exceeding the SCAQMD 10 in one million threshold at an approximate distance of 2.5 miles away from the project boundary, the potential increment cancer risk along SR60 would be less than 2 in one million. Based on results shown in Figure 4.3-4 for 30 years of the full project buildout scenario, without mitigation, no segment along SR-60 would exceed the 10 in one million cancer risk threshold; at a distance of less than two miles from the project boundary, the incremental cancer risk is less than 2 in one million. The project's mitigation conditions require that all construction equipment over 50 horsepower would be Tier 4, all diesel trucks accessing the project during operation be model year 2010 or newer, that all on-site equipment be Tier 4. As shown in Figures 4.3-5 and 4.3-6, with mitigation, the incremental cancer risk along SR-60 will be less than 10 in one million and less than significant. Because project-generated vehicle trips and associated impacts decrease with an increase in distance from the project site, the project impact along the regional freeway network that is outside the HRA's study area will be less than those presented in Figures 4.3-3 and 4.3-4. The project impact to regional freeway network will be the greatest during project full operation, as shown in Tables 4.3-31 and Tables 4.3-34, the maximum cancer risk for receptors along the SR-60 freeway would be 3.4 without mitigation and 3.2 with mitigation (less than the 10 in one million threshold). Therefore, the project health impact along the regional freeway network will be less than significant.

Of note, results in Figure 4.3-3 is based on project construction overlapping with project operations (partial project operation since project is not built out yet) while Figure 4.3-4 is based on full project operation. The difference between the two sets of results indicate that the incremental cancer risk in Figure 4.3-3 is mainly driven by the DPM emissions from onsite construction equipment. Therefore, the impact would be localized near the project site and will disappear once construction completes.

Informational Purposes: Morbidity and Mortality

There is no established threshold or approved methodology for calculating morbidity and mortality. For purposes of this assessment, morbidity is a term for describing how an external effect such as air pollution would exacerbate an existing illness and other health effect. Mortality is another term for death. The following represents the result of the calculations for long-term mortality and various morbidity health endpoints due to DPM for the project prior to the application of mitigation. The locations for the morbidity/mortality estimations were at the location with the highest combined annual DPM concentration and census tract population such that the change in DPM would affect the greatest number of people. A cumulative total of each mortality/morbidity health endpoint was also calculated that totals the number of added cases of an identified health endpoint at each census tract location within the entire region potentially impacted by the project emissions.

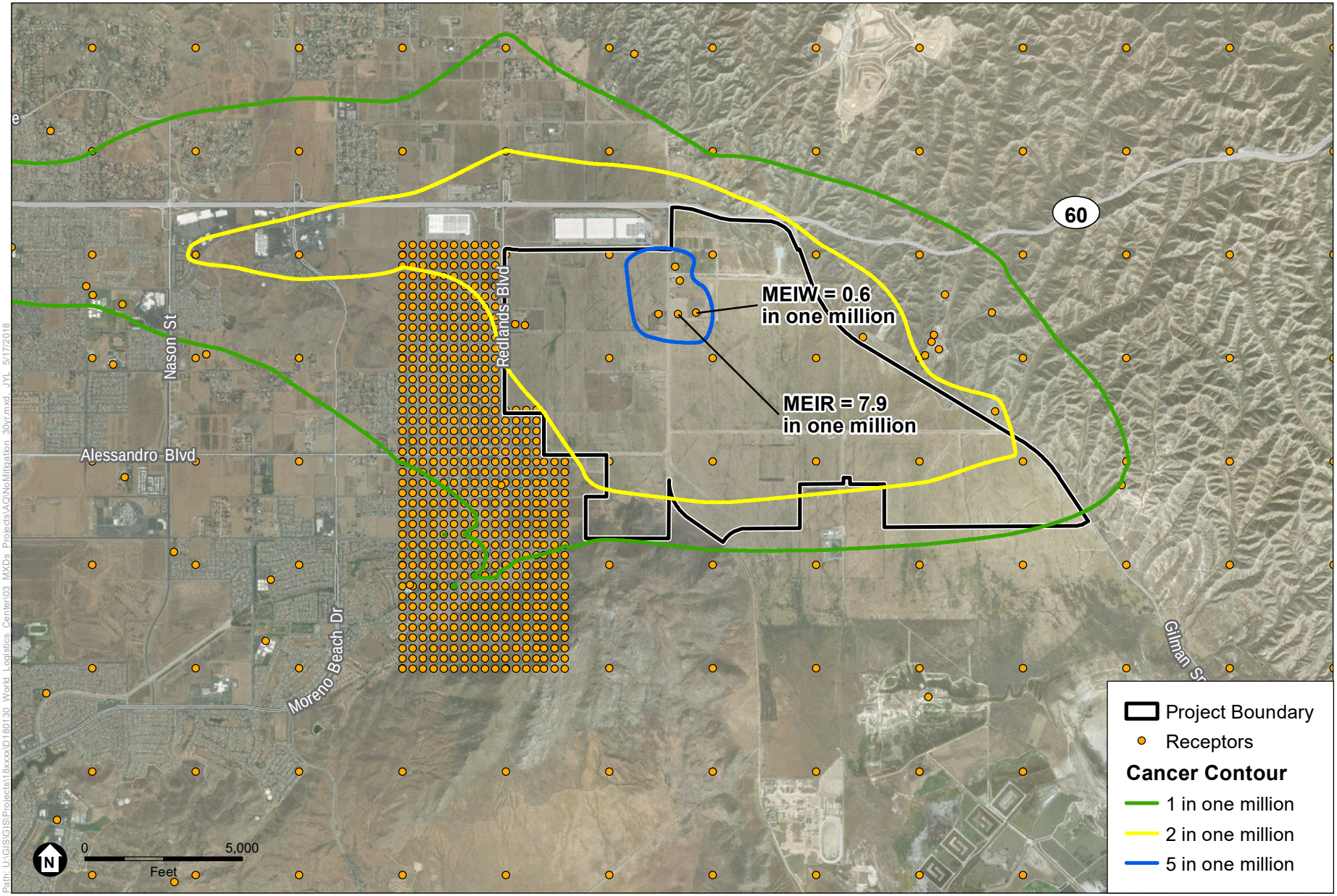


SOURCE: ESRI 2016; ESA 2018

World Logistics Center

Figure 4.3-3
Incremental Project Cancer Risk – No Mitigation
(Construction and Operation)

ESA



SOURCE: ESRI 2016; ESA 2018

World Logistics Center

Figure 4.3-4

Incremental Project Cancer Risk – No Mitigation
(30 Years of Full Operation)

ESA

The estimates of mortality and morbidity impacts are based on the application of concentration-response functions (C-R functions) that relate the change in the number of adverse health effect incidences in a population to a change in air pollutant concentration experienced by that population. However, such estimations are subject to great uncertainty. Sources of uncertainty include emission estimates, population exposure estimates, form of C-R functions, baseline rates of mortality and morbidity that are entered into the C-R functions, and occurrence of additional not-quantified adverse health effects. It should be noted that the nature of PM as a complex mixture of various pollutants, as well as the confounding health effects of pollutants such as sulfur dioxide, NO_2, CO, and ozone that tend to co-occur with PM in ambient air, greatly increase the complexity of deriving accurate PM concentration-response functions.

Exposure to the Project's DPM emissions prior to mitigation would result in an increase in mortality of approximately 0.00011 additional cases per year at the location where the project has its maximum impact from DPM emissions or 0.001 additional cases over all of the census tracts contained in the modeling domain.

Table 4.3-32 summarizes the estimates of the various morbidity health endpoints due to the emissions from the project without mitigation. As shown in these tables, the project would not result in a single new added case of a quantified health endpoint either at location where the impact would be greatest or cumulatively over the entire air dispersion modeling domain examined in this assessment.

Table 4.3-32: Estimates of Various Morbidity Health Endpoints from Project Emissions Without Mitigation

Health Endpoint	Maximum Added Occurrences (cases/year)	Cumulative Occurrences over the Entire Modeling Region (cases/year)
Long-term Mortality (Ages 30+)	0.00011	0.001
Chronic Illness: Chronic Bronchitis (Age 27+)	0.00053	0.005
Hospitalization: Chronic Obstructive Pulmonary Disease Age 65+)	0.000001	0.000008
Hospitalization: Pneumonia (Age 65+)	0.000001	0.00001
Hospitalization: Cardiovascular (Age 65+)	0.000002	0.00002
Hospitalization: Asthma (Age 0-64)	0.0000005	0.000005
Hospitalization: Asthma-related Emergency Visits (Ages 0-64)	0.000002	0.00001

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Mitigation Measures. The mitigation measures previously identified under other impact sections are required (**Mitigation Measures 4.1.6.1A, 4.3.6.2A**, **4.3.6.2B**, **4.3.6.2D, 4.3.6.3A, 4.3.6.3B, 4.3.6.3C, 4.3.6.3D,** and **4.3.6.3E**) to reduce construction and operational emissions of criteria pollutants would reduce the estimated cancer risks associated with the project. Additionally, the following mitigation measure is required to ensure that significant health risk does not occur at on-site residential receptor.

4.3.6.5A Prior to the issuance of grading permits, the applicant shall arrange for MERV 13 air filters to be installed at the residence located at 13241 World Logistics Center Parkway.

Mitigation Measure 4.3.6.3B(l) would require that all diesel trucks that access the project site be model year 2010 or later and limits truck and vehicle idling to 3 minutes. **Mitigation Measure 4.3.6.2A(a)** would require that Tier 4 construction equipment be used on the project site. These mitigation measures would reduce the cancer risk from the project.

Mitigation Measure 4.3.6.3C may encourage alternative fueled vehicles and trucks on the project site. As discussed above, a High EV Penetration scenario assumes that up to 40 percent of the project's heavy duty trucks would be electric-powered; however, no reduction is taken. **Mitigation Measure 4.3.6.3D** may reduce vehicle miles traveled to food establishments; however, no direct reduction is taken. **Mitigation Measure 4.3.6.3E** requires that if transportation refrigeration units are to be used, electrical hookups would be required. In addition, refrigerated space is prohibited unless the impacts do not exceed any environmental impacts identified in this Revised FEIR. Therefore, it is assumed in the unmitigated and mitigated estimates that there would be no transportation refrigeration units. **Mitigation Measure 4.3.6.5A** requires that the Applicant install MERV 13 air filters at the residence located at 13241 World Logistics Center Parkway. The Applicant currently retains ownership of this property and can arrange for the installation of MERV 13 filters at this residence.

Level of Significance after Mitigation for Sensitive Receptor Cancer Risk. Less than significant. Table 4.3-33 and Figure 4.3-5 show the cancer risks for the construction and operation HRA after application of mitigation. As noted, the cancer risks are substantially lower after mitigation, and the SCAQMD cancer risk significance threshold would not be exceeded at any of the onsite or offsite receptors within the study area. The large reduction in cancer risk after mitigation is attributable principally to the reduced diesel PM associated with the commitment to Tier 4 construction equipment. The impact of this mitigation is largely felt during the first 3 to 5 years of construction when the "Current OEHHA Guidance" assigns large age sensitivity factors to the first few years of the 30-year exposure duration. Table 4.3-34 and Figure 4.3-6 show the mitigated cancer risk from the 30-year full project buildout.

Through mitigation requirements, new technology diesel engines are required for the WLC project. The mitigation conditions require that all diesel trucks accessing the project during operation be model year 2010 or newer and that all on-site equipment be Tier 4. The results of the HEI Study indicate that the project mitigation requiring the application of Model Year 2010 engines as well as the use of Tier 4-compliant off-road construction equipment are not expected to result in emissions that would be associated with the formation of cancer in exposed individuals. The HEI study clearly demonstrates that the application of new emissions control technology to diesel engines have virtually eliminated the health impacts of diesel exhaust.

Mitigation measures 4.3.6.2A(a) and 4.3.6.3B(l) require 2010-compliant trucks for operation and Tier 4 equipment for construction and require 2010-compliant trucks for operation, respectively, both of which rely on diesel particulate filters similar to those tested in the HEI study. These vehicles reduce emissions by 90% when compared to 2006 vehicles and by 99% when compared to uncontrolled diesel engines. Recent emissions testing by CARB revealed that these diesel engines are cleaner than originally estimated. These findings, which are reflected in the CARB emissions factor model EMFAC2014, are 70% cleaner than previously estimated.

Table 4.3-33: Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Construction (Construction and Operation HRA), With Mitigation

Receptor Location	Incremental Increase in Cancer Risk During Project Construction (risk/million)	Incremental Increase in Cancer Risk During Project Operation (risk/million)	Total Incremental Increase in Cancer Risk[(1)] (risk/million)	SCAQMD Cancer Risk Significance Threshold (risk/million)	Exceeds Threshold?
Maximum risk anywhere in the modeling domain[(2)]	8.3	1.4	9.7	10	No
Existing residences within the project boundaries					
13241 World Logistics Center Pkwy	8.3	1.4	9.7	10	No
13100 World Logistics Center Pkwy	4.4	2.2	6.6	10	No
13200 World Logistics Center Pkwy	4.3	1.7	6.0	10	No
30220 Dracaea Ave	4.9	2.7	7.6	10	No
29080 Dracaea Ave	2.5	0.9	3.3	10	No
29140 Dracaea Ave	2.9	1.0	3.8	10	No
Maximum risk at any area outside of the project boundaries[(3)]	2.0	0.6	2.6	10	No

Notes:

* Pursuant to Mitigation Measure 4.3.6.5A, the Applicant shall install MERV-13 air filters at the residence located at 13241 World Logistics Center Parkway (formerly Theodore Avenue).

(1) Cancer risk calculation conservatively assumed all receptors modeled are residential receptors. 30-year average exposures from 2020 to 2049 (includes diesel PM emissions from construction and operation); cancer risk estimates derived from the EMFAC2014 emission model and "Current OEHHA Guidance" for estimating cancer risks

(2) Location is at existing residences within the boundaries of the project

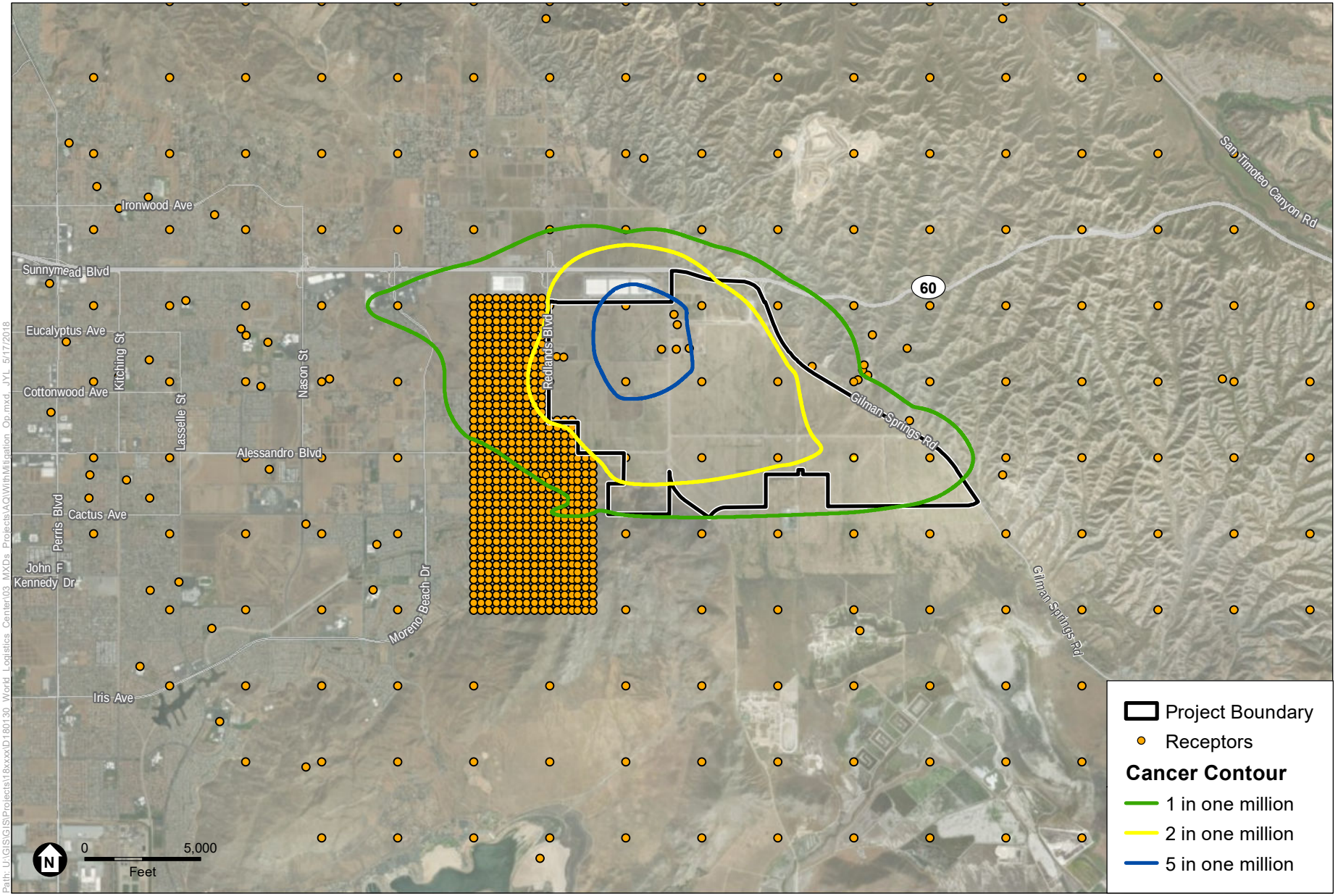
(3) Location is adjacent to the midwestern boundary of the project

Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.

Table 4.3-34: Estimated Cancer Risks, 30-Year Exposure Duration for Sensitive/Residential Receptors Starting from Beginning of Project Full Operation in 2040, With Mitigation

Receptor Location	Total Incremental Increase in Cancer Risk[1] (risk/million)	SCAQMD Cancer Risk Significance Threshold (risk/million)	Exceeds Threshold?
Maximum risk anywhere in the modeling domain[2]	7.1	10	No
Maximum risk within the project boundaries[3]	7.1	10	No
Maximum risk at any area outside of the project boundaries[4]	3.2	10	No
Maximum risk along SR60 freeway outside of the project boundaries[5]	3.2	10	No

Notes:
[1] Conservatively assumed all receptors in the studied domain are residential receptors and will have 30-year average exposures from 2040 to 2069 (includes diesel PM emissions from full project operation); cancer risk estimates derived from the TIA, EMFAC2014 emission model, SCAQMD HRA guidance and "Current OEHHA Guidance" for estimating cancer risks
[2] Location is at the existing residences within the boundaries of the project.
[3] Location is at the existing residence located at 30220 Dracaea Avenue.
[4] Location is to the northwest of the project boundary, on the west side of Redlands Boulevard and north of Fir Avenue.
[5] Location is south of SR 60 freeway, same as the location in footnote (4), which to the northwest of the project boundary, on the west side of Redlands Boulevard and north of Fir Avenue.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report*, 2018.



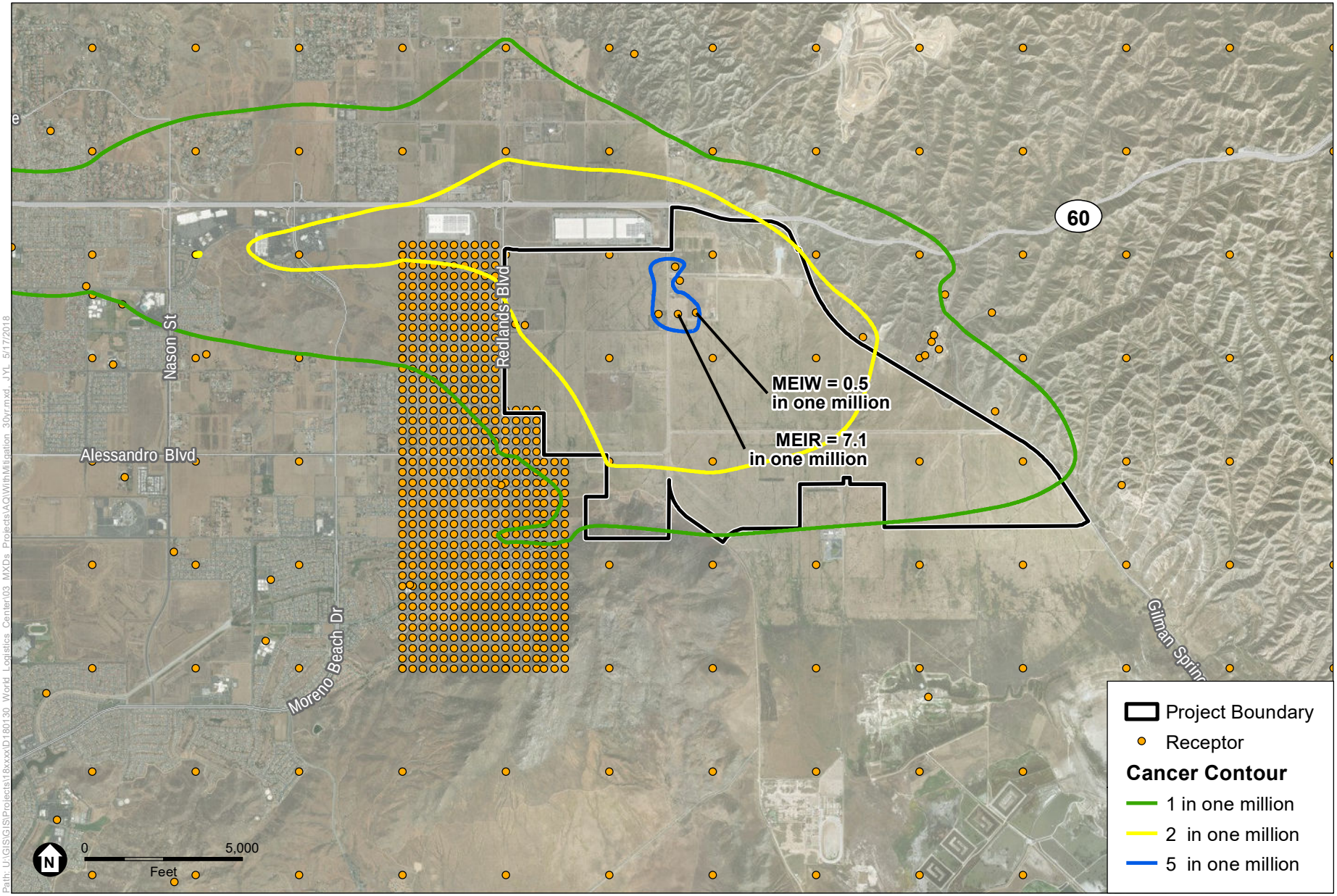
SOURCE: ESRI 2016; ESA 2018

World Logistics Center

Figure 4.3-5

Incremental Project Cancer Risk – With Mitigation
(Construction and Operation)

ESA



SOURCE: ESRI 2016; ESA 2018

World Logistics Center

Figure 4.3-6

Incremental Project Cancer Risk – With Mitigation
(30 Years of Full Operation)

ESA

Beginning in 2001, USEPA and CARB began issuing a series of regulations that require new diesel-powered vehicles and equipment to use the latest emissions control technology. This technology relies on two components. The first is a diesel particulate filter, which is capable of reducing particulate matter emissions by over 90% (required for new engines beginning in 2007). The second technology is selective catalytic reduction, which reduces emissions of nitrogen oxides by over 90% (required for new engines beginning in 2010). Diesel emissions from equipment equipped with this technology is referred to as NTDE. As a result of the advances in emission control technology, USEPA, CARB, and other government and industry stakeholders commissioned a series of studies called the Advanced Collaborative Emissions Study (ACES). ACES has been guided by an ACES Steering Committee consisting of representatives of HEI and the Coordinating Research Council (CRC: a nonprofit organization that directs engineering and environmental studies on the interaction between automotive or other mobility equipment and petroleum products), along with the U.S. Department of Energy, U.S. EPA, engine manufacturers, the petroleum industry, CARB, emission control manufacturers, the National Resources Defense Council, and others. The HEI, funded in part by USEPA, was selected to oversee Phase 3 of ACES.

Phase 3 of ACES evaluated whether emissions from new technology diesel engines cause cancer or other health effects. Specifically, it evaluated the health impacts of a 2007-compliant engine equipped with a diesel particulate filter. HEI found that lifetime exposure to NTDE did not cause carcinogenic lung tumors. The study also confirmed that the concentrations of particulate matter and toxic air pollutants emitted from NTDE are more than 90% lower than emissions from traditional older diesel engine.

As a result of the very low emissions from NTDE and the research conducted by HEI, it is projected that the project would not result in a significant increase in cancer health risks from the project's diesel emissions. Therefore, the project would have a less than significant health risk impact.

As discussed above, the HRA analysis assumed DPM emissions from NTDE causes cancer (contrary to the HEI findings) and used a very conservative application of the "Current OEHHA Guidance" to the World Logistics Center project (which was provided for informational purposes). Although air quality significance thresholds have been established for outdoor environments, a significant portion of human exposure to air pollutants occurs indoors where people spend more than 90 percent of their time (USEPA, 2011). One approach to reduce exposure is the installation of high efficiency panel filters inside the HVAC system. Air filters and other air-cleaning devices are designed to remove pollutants from indoor air. Some are installed in the ductwork of a home's central heating, ventilating, and air-conditioning (HVAC) system to clean the air in the entire house. In studies of the effectiveness of air filtration systems in classrooms (SCAQMD, 2003) and by the EPA in residences (USEPA, 2010), the combination of an HVAC system with a high performance panel filter reduced indoor levels of fine particulate matter, PM2.5 and smaller particles by 70 to 90 percent.

The use of a filtration system consisting of the application of filters with a rating of ASHRSE Standard 52.2 MERV-13, as required by Mitigation Measure 4.3.5.4.A, is sufficient to capture a significant portion of the diesel particulate matter. However, the filtration system would not remove the smallest of particles (less than approximately 0.01 to 0.2 micron in diameter). MERV-13 filters would, however, reduce particles in the range of 0.3 to 1 micron by up to 75 percent and particles larger than 1 micron by 90 percent (see Table 1 of the Addendum to CARB, 2013b). Based on measurement studies of the size distribution of the collected DPM, approximately 0.1 to 10 percent of the total DPM mass includes particles between 0.01 and 0.2 micrometer in diameter, particles between 0.3 and 1 micrometer in diameter comprise 70 percent of the total DPM mass, and particles above 1 micrometer comprise 5 to 20 percent of the total DPM mass (DieselNet.com, 2002).

Since the cancer risk from DPM is calculated from the mass of DPM emitted, the quantity of DPM reduced by the action of air filters would thus equate to a reduction in cancer risk. The application of MERV-13 air filter filtration system would result in a reduction of DPM exposures by approximately 70 percent, as calculated below.

DPM size:	0.01 to 0.2 µm	0.3 to 1 µm	Greater than 1 µm
Calculation:	10% mass x 0% reduction	70% mass x 75%	20% mass x 90%
Reduction:	0% reduction	52.5% reduction	18% reduction

Attributing an adjustment for time that windows might be open, residents would be outside, or for different compounds that result in the cancer risk would reduce the efficacy of the filters by about 20 percent, bringing the total cancer risk reduction from the filters to 50 percent.

The use of the filters would bring the OEHHA-calculated risk below the SCAQMD threshold eliminating any possible risk from the project on any onsite or offsite receptors within the study area. Health risk impacts are less than significant and no further mitigation is required.

In summary, the implementation of all the recommended mitigation measures, including the requirement to use 2010 diesel engine emissions standards, Tier 4 construction equipment, and installation of air filters at the identified on-site residence will reduce the OEHHA-calculated cancer risk to below 10 in one million at all sensitive receptors. Therefore, impacts would be less than significant.

Finally, note further that before mitigation, the cancer risk burden is estimated at 0.09 and is less than the SCAQMD cancer burden significance threshold of 0.5. Therefore, the project would not exceed the SCAQMD's cancer burden significance threshold.

Summary of Project-Related Air Quality Impacts

Based on the preceding analyses in Sections 4.3.5.1 through 4.3.6.5, the WLC project will have the following direct air quality impacts:

Table 4.3-35: Summary of Project-Related Air Quality Impacts

Impact	Air Quality Topic/Issue	Impact Conclusion
Project Impacts		
4.3.5.1	Odors	Less than Significant No Mitigation Required
4.3.5.2	Long-Term Micro-Scale CO Hotspot Emissions	Less than Significant No Mitigation Required
4.3.6.1	Air Quality Management Plan Consistency	Significant (inconsistent) and Unavoidable with Mitigation
4.3.6.2	Regional Construction Emissions	Significant and Unavoidable with Mitigation (VOC, NOx, CO, and PM_{10}; regional health effects from ozone and particulate matter)
4.3.6.3	Localized Construction and Operation (LSTs)	Significant and Unavoidable with Mitigation (PM_{10}) (onsite and offsite)
4.3.6.4	Regional Long-Term Operational Emissions	Significant and Unavoidable with Mitigation (VOC, NOx, CO, PM_{10}, and $PM_{2.5}$; regional health effects from ozone, PM_{10}, and $PM_{2.5}$)
4.3.6.5	Sensitive Receptors (a) Localized PM_{10}	Significant and Unavoidable for PM_{10} with Mitigation (onsite) Less than Significant with Mitigation (offsite)
	(b) Non-Cancer Acute and Chronic Health Risks	Less than Significant
	(c) Cancer Risks– Sensitive Receptors	Less than Significant with Mitigation
	(d) Cancer Burden	Less than Significant
	(e) Cancer Risks –Workers	Less than Significant
	(f) Cancer Risks – School Sites	Less than Significant

NOTE TO READERS: This portion of the Revised Sections of the FEIR entirely replaces Section 4.4 of the FEIR. The cumulative portion of Section 4.4 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.4 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.4 means that the corresponding portion of Section 4.4 in the FEIR remains unchanged or has been deleted.

4.4 BIOLOGICAL RESOURCES

The Superior Court ruling requires the following actions with regards to Biological Resources:

"The FEIR should remove all references to and consideration of the 910 acres of SJWA and MSHCP land as "buffer zone" or "CDFW Conservation Buffer Area" in the Biological Resources and Habitat Impacts analysis, and the potential environmental impacts on Biological Resources should be re-analyzed without and consideration of said buffer". The Biological Resources and Sensitive Species Survey Results Technical Memorandum is included in Appendix B.

The following text and figures from the FEIR has been amended to address the above outlined requirements. In particular, the text has been amended to ensure that the "buffer" concept was eliminated and not considered, and this document does not consider or evaluate any part of the San Jacinto Wildlife Area (SJWA) as a buffer area, and instead, the analyses below evaluate whether or not the WLC Project would have any potential impacts on biological resources.

This section discusses the potential impacts of development of the WLC project on biological resources. In 2012, Michael Brandman Associates (MBA) conducted a Habitat Assessment, Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, Habitat Acquisition and Negotiation Strategy (HANS) Report, and California Environmental Quality Act (CEQA) Biological Resources Assessment to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requirements. The 2012 MBA report summarized the results of several focused surveys conducted since 2004 on the WLC property. In 2014, the various WLC project studies were updated to reflect the most current information about the World Logistics Center (WLC) site. ESA completed updated biological resource assessments in 2018 to document any changes to the results from the previous surveys conducted by MBA. Information to evaluate and analyze the project's impacts to biological resources is derived from the following references and studies included in Appendix E:

- 2018 focused surveys for Los Angeles pocket mouse, burrowing owl and coastal California gnatcatcher conducted by ESA.
- *Habitat Assessment, MSHCP Consistency, and HANS Report*, MBA, original dated December 20, 2012, revised September 2014 and May 2018. (This includes the focused surveys included as separate documents in the previous version.)
- *Jurisdictional Delineation of the World Logistics Center,* MBA, original dated October 29, 2012, revised dated December 19, 2013.
- *World Logistics Center – Jurisdictional Delineation Update,* ESA, December 19, 2016 letter to Highland Fairview.
- Determination of Biologically Equivalent or Superior Preservation (DBESP), MBA, December 5, 2013, revised September 2014 and May 2018.

In addition, the analysis contained in this section is based on the following reference documents:

- Western Riverside County Regional Conservation Authority – World Logistics Center Joint Project Review (JPR) Consistency Determination 13-12-12-01, dated October 17, 2014.
- *Conservation Element*, City of Moreno Valley General Plan, adopted in July 2006.

- Western Riverside County MSHCP, adopted October 2003.
- MSHCP Final EIR, certified October 2003.

For the reader's reference, this portion of the Revised Sections of the FEIR and each of the technical reports and analyses contained herein have been written to address the court ruling summarized in Section 1.0 of this Revised Sections of the FEIR.

The MBA report included an assessment of the WLC Specific Plan (WLC site) (2,610 acres), the northern portion of the San Jacinto Wildlife Area (SJWA), the SDG&E Moreno Compressor Plant (194 acres), an "indirect impact zone" surrounding portions of the WLC site property (502 acres, all off-site within the SJWA and east of Gilman Springs Road), potential offsite infrastructure facilities (104 acres) and modified survey areas to match the reduced WLC site of the specific plan from the original 2005 MBA surveyed areas. In this section, the combined areas described in this paragraph total 5,972 acres and are hereafter referred to in this section as the survey area. This area has been resurveyed by ESA in March/April, 2018, except for the "indirect impact zone."

The information presented in this section is based on surveys of various areas of the project site conducted by MBA from 2005 to 2013 as referenced above and by ESA in 2018. Development is only proposed on the WLC site; the SJWA and public facilities property are not proposed for development and are expected to remain in their present condition. The habitat assessment information summarized in this section was collected during several site visits to the WLC site, the northern portion of the SJWA, the public facilities property, and the off-site improvement area at various times from 2005 to 2018.

4.4.1 Existing Setting

The WLC site is located on the fringe of the urbanized development area of the City of Moreno Valley. The majority of the WLC site has been used for agricultural purposes for decades. Various portions of the area contain structures associated with previous agricultural activities, including residential structures, farm buildings, concrete pads, and fences. There are two small portions of relatively undisturbed vegetation on site, one in the northeastern portion of the site on land owned by Metropolitan Water District, and the second in the southwestern portion of the site in the rocky hills south of Alessandro Road and west of World Logistics Center Parkway. Many of the off-site facilities such as water and sewer lines and access to potential water reservoirs are proposed along existing rights-of-way in the City of Moreno Valley. Debris basins are proposed along the eastern side of Gilman Springs Road to prevent debris and sediment from the Badlands from disrupting traffic on Gilman Springs Road after significant storm events. The northern portion of the SJWA south of the Specific Plan area is similar in history and conditions to the project site. The northernmost portion of the SJWA has been plowed for decades and portions of it were recently farmed. A portion of the northernmost portion of the SJWA contains areas of non-native grasslands, although aerial photographs show that the area has been intermittently tilled over last 80 years.

The entire WLC site is regulated by the MSHCP, which is a regional conservation plan adopted by Riverside County in 2003. The MSHCP establishes core areas identifying important land that supports listed or sensitive species. The MSHCP also establishes criteria cells for land with important resources that need to be protected as part of the overall plan. The MSHCP identifies these critical lands for preservation or for relatively passive open space and utility uses. The MSHCP serves as a regional habitat conservation plan. The MSHCP was created, studied, and adopted by the County, the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and fourteen cities in Riverside County. A more complete discussion of the MSHCP is provided in Section 4.4.1.6.

4.4.1.1 Vegetation, General

The vegetation data in the study area are from the City's *General Plan Final Program EIR*[1] and the *MSHCP Consistency Analysis Report*[2] for the WLC site. The following describes the vegetation within various WLC sites, including the Specific Plan area, Offsite Improvement Area, northern portion of the SJWA adjacent to WLC, Indirect Impact Zone, and Additional Survey Areas. Table 4.4-1 provides a numerical summary of the various types of vegetation within the WLC planning area. For this Revised Sections of the FEIR acreages are limited to the Specific Plan area and the Offsite Improvement Area.

4.4.1.2 Vegetation (Project Survey Area)

There are eleven (11) plant communities/vegetation types that occur within the project survey area: extensive agriculture (e.g., dry-land farming), non-native grassland, urban/developed, disturbed, Riversidean sage scrub, mule fat scrub, non-vegetated channel, open water, ornamental, southern willow scrub, and northern mixed chaparral (see Figure 4.4.1). Figure 4.4.2 depicts the location of drainage features and Riparian/Riverine areas. The following acreages are for approximately 5,972 acres including the WLC site (2,610 acres) plus off-site improvements and the existing Highland Fairview Corporate Park (Skechers) property, which was included in some of the historical vegetation surveys for this area. The vegetation of the SJWA/public facilities lands and the Off-site Analysis Zone are addressed following the information on the WLC site (i.e., areas of proposed or existing development).

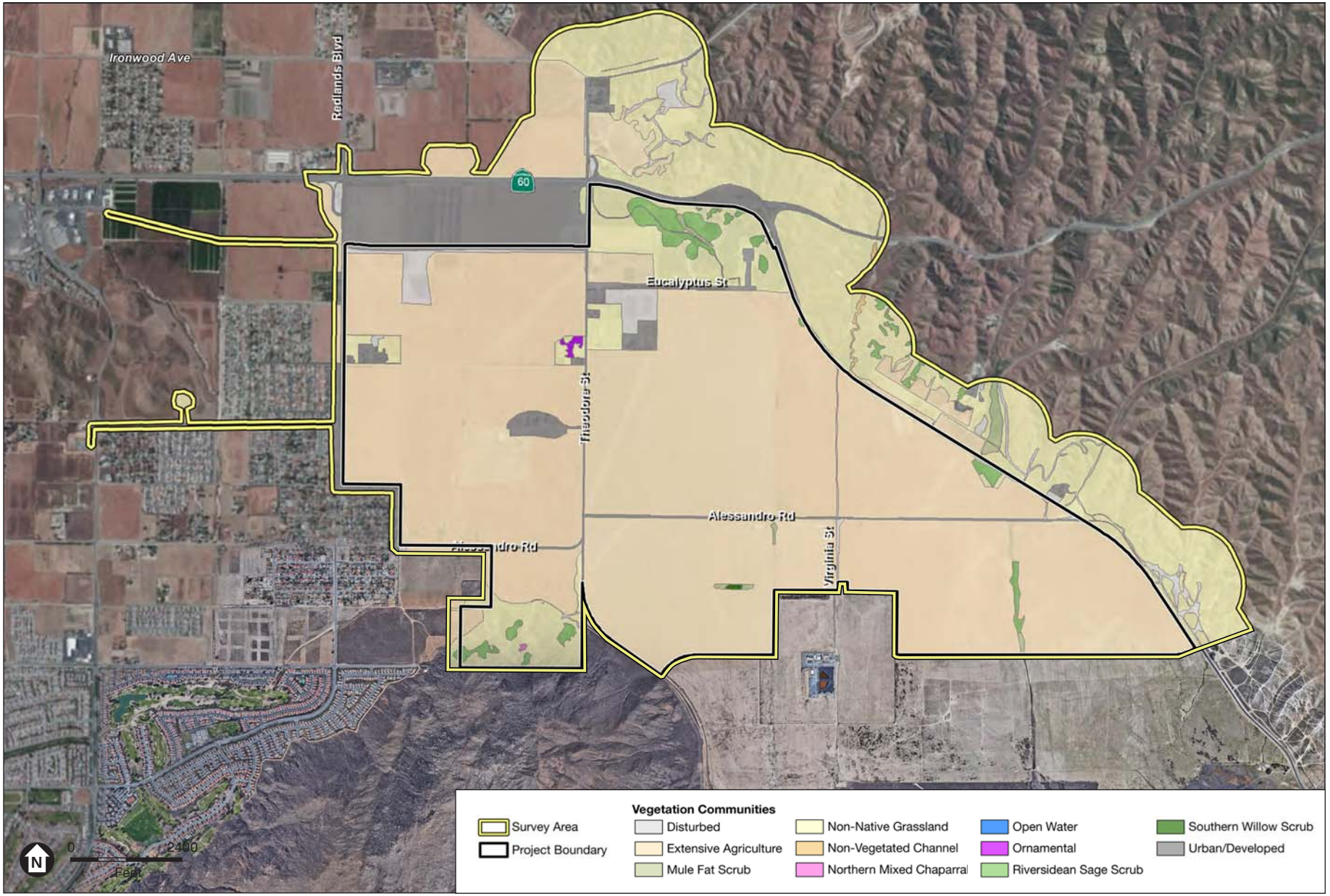
Almost all (5,815 acres or 97.4 percent) of the project survey area (5,972 acres) is disturbed by human activity,[3] mainly dryland farming, with only 157 acres or 2.6 percent consisting of native plant communities. The nature and extent of the existing plant communities are discussed below in the order of their presence on the property.

a. Extensive Agriculture

This disturbed plant association covers 2,837.0 acres or 47.5 percent of the project survey area, and includes areas where vegetative cover comprises less than 10 percent of the surface area and where there is evidence of intense soil surface disturbance associated with agricultural uses. There are approximately 2,200 acres of extensive agriculture found within the WLC site and there is no extensive agriculture in the Offsite Improvement Areas. This community is generally dominated by winter wheat (*Triticum aestivum*), but also has small inclusions of non-native vegetation along the margins of the fields. Non-native vegetation within disturbed land will have a high predominance of invasive or weedy species that are indicators of heavy, soil disturbance, such as horse nettle (*Solanum elaeagnifolium*), bindweed (*Convolvulus arvensis*), and short-pod mustard (*Hirschfeldia incana*). There was no modification to this mapped plant association made after the 2018 update survey.

The extensive agriculture community in the WLC site also contains various interstitial ditches that are excluded from regular heavy-agricultural equipment disturbances, such as disking. These areas are less frequently disturbed and contain larger, more established, ruderal vegetation, such as tree tobacco (*Nicotiana glauca*) and tree of heaven (*Ailanthus altissima*), in addition to the fast-growing Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), lamb's quarters (*Chenopodium album*), sow thistle (*Sonchus oleraceus*), and short-pod mustard. The interstitial ditch areas do not occupy enough area nor are continuous enough to constitute a separate plant community and are therefore considered part of the extensive agricultural plant community. The majority of the WLC site is occupied by extensive agriculture and recently disked or heavily grazed, such as in the pasturelands in the northwestern portion of the WLC site. Most of these areas are disked at least once each year and planted with winter wheat.

1 City of Moreno Valley Final Program EIR Conservation Element, City of Moreno Valley, October 2006.
2 *Habitat Assessment, MSHCP Consistency Analysis, and HANS report*, Michael Brandman Associates, September 2014.
3 Includes agriculture, non-native grassland, urban/developed, disturbed, and ornamental categories.



SOURCE: LSA 2013; ESA, 2018

World Logistics Center

Figure 4.4-1
Vegetation Communities

ESA

Specific Plan Boundary

Potential Jurisdictional and Non-Jurisdictional Features

- Potential USACE/RWQCB/CDFW Jurisdictional
- Potential USACE/RWQCB/CDFW Jurisdictional (Existing Impact - Concrete Channel)
- Potential RWQCB/CDFW Jurisdictional
- Potential RWQCB/CDFW Jurisdictional (Existing Impact - Concrete Channel)
- Potential Non-Jurisdictional

0 2,000 Feet

Path: U:\GIS\GIS\Projects\18xxxx\D180130 World Logistics Center\03 MXDs Projects\Bio\Drainage Features.mxd JYL 6/27/2018

SOURCE: ESRI 2016; ESA 2018

World Logistics Center

Figure 4.4-2
Drainage Features

ESA

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b. Non-Native Grassland

Non-native grassland is characterized by a dense to sparse cover of non-native annual grasses often associated with numerous weedy species and native annual forbs (wildflowers), especially in years with plentiful rain. Seed germination occurs with the onset of winter rains. Some plant growth occurs in winter, but most growth and flowering occurs in the spring. Plants then die in the summer, and persist as seeds in the uppermost layers of soil until the next rainy season. Dominant plants include brome (*Bromus* spp.), wild oat (*Avena* spp.), Russian thistle, London rocket (*Sisymbrium irio*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), short-pod mustard, stinknet (*Oncosiphon piluliferum*), Jimson weed (*Datura stramonium*), and common sunflower (*Helianthus annuus*). Non-native grassland occupies 2,326.0 acres or 38.9 percent of the project survey area, mainly in the Badlands area east of Gilman Springs Road and the northern portion of the SJWA lands to the south of the WLC site. There are 219 acres of non-native grassland found within the WLC site and there are 9 acres of non-native grassland in the Offsite Improvement Areas. There was no modification to this mapped plant association made after the 2018 update survey.

Table 4.4-1: Summary of Onsite and Offsite Improvement Area Vegetation

Vegetation Community	WLC Site	Offsite Improvements Area
Extensive Agriculture	2,193	0
Non-Native Grassland	219	95.0
Urban/Developed	92	4.0
Disturbed	48	3.0
Riversidean Sage Scrub	48	0
Mule Fat Scrub	5	0
Southern Willow Scrub	1	0
Non-Vegetated Channel	0	2.0
Ornamental	3	0
Northern Mixed Chaparral	1	0
Totals	**2,610.0**	**104.0**

Source: Habitat Assessment, MSHCP Consistency Analysis, and HANS report, Michael Brandman Associates, September 2014. Acreages corroborated by ESA in April 2018.

c. Urban/Developed

The urban/developed area includes any form of human disturbance associated with the development of rural residences that has resulted in permanent impacts to natural communities. This land use type comprises approximately 492.0 acres or 8.2 percent of the project survey area. By definition, urban/developed areas include roads, buildings and structures, pavement, concrete, landscape vegetation, and windrow vegetation. There are 92 acres of urban/developed found within the WLC site and there are 4 acres of urban/developed in the Offsite Improvement Areas. The isolated occurrences of the urban/developed community occur throughout the study area. The urban/developed area is not associated with any native vegetation and provides only limited habitat value, primarily as cover, nesting, and perching opportunities for birds and common terrestrial wildlife that have adapted to urban, agricultural, or other disturbed areas associated with human activity. The largest area of Urban/Developed land occurs in the northwestern corner of the survey area and is associated with the existing Skechers building. There was no modification to this mapped land use type made after the 2018 update survey.

d. Disturbed Areas

These areas support sparse ruderal vegetation and an occasional scattering of native plant species. This type of “habitat” is not a plant community and is considered to be of little or no value to wildlife. Disturbed areas include an area in the northern portion of the project site associated with the adjacent

rural residences. These areas have been cleared of vegetation. The remaining disturbed areas are associated with dirt access roads and the area surrounding the existing natural gas compressor station. This category occupies 150 acres or 2.5 percent of the project survey area. There are 48 acres of disturbed areas found within the WLC site and there are 3 acres of disturbed areas in the Offsite Improvement Areas. There was no modification to this mapped habitat made after the 2018 update survey.

e. Riversidean Sage Scrub

Stands of Riversidean sage scrub (RSS) range from fairly open to dense with dominant species including brittlebush (*Encelia farinosa*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), California sagebrush (*Artemisia californica*), and coastal goldenbush (*Isocoma menziesii*). Other species observed include four-winged saltbush (*Atriplex canescens*), scalebroom (*Lepidospartum squamatum*), and California aster (*Corethrogyne filaginifolia*), in addition to non-native grasses such as ripgut brome (*Bromus diandrus*), slender oat (*Avena barbata*), red brome (*Bromus madritensis* ssp. *rubens*), and non-native weedy species such as short-pod mustard. There are 97.0 acres (1.6%) of RSS located within the main drainage feature on the eastern side of the project survey area (Drainage Feature 9, see Figure 4.4.2). There are 48 acres of RSS found within the WLC site and there is no RSS in the Offsite Improvement Areas. The quality of the habitat on site can generally be considered moderate based on vegetation characteristics such as plant density, diversity of species, and level of disturbance. The stand within Drainage Feature 9 is of low quality due to high levels of disturbance, low density of native species, and sparse coverage. There are small patches of RSS in the northeastern and southwestern corners of the project survey area. There was no modification necessary for this mapped plant association after the 2018 update survey.

f. Mule Fat Scrub

Mule fat scrub is a widespread natural community throughout California and usually occurs below 2,000 feet. Mule fat scrub occupies approximately 41.0 acres or 0.7 percent of the project survey area within a portion of Drainage Feature 9 in the southeastern portion of the WLC Specific Plan area and the northern portion of the SJWA lands to the south. There are 5 acres of mule fat scrub found within the WLC site and there is no mule fat scrub in the Offsite Improvement Areas. The mule fat scrub in the WLC site is generally characterized by dense stands of mule fat (*Baccharis salicifolia*) with various shrubs, weeds, and non-native grasses sparsely intermixed. There was no modification necessary for this mapped plant association after the 2018 update survey.

All areas of mule fat scrub within the drainage feature on the site are relatively undisturbed and contain little trash dumping, agricultural activities, or the presence of domesticated animals. The mule fat scrub plant community provides moderate quality habitat for a number of species. The dominant species observed within the mule fat scrub community were mule fat and tree tobacco. Other species observed include cheeseweed, wild radish, Russian thistle, common sunflower, and short-pod mustard, in addition to non-native grasses such as ripgut brome, slender oat, and red brome. Drainage Feature 9 also contains scattered occurrences of scalebroom and four-winged saltbush.

g. Southern Willow Scrub

The southern willow scrub community is characterized by dense, broad-leafed, winter deciduous riparian thickets of vegetation, and is dominated by several species of willow tree. Scattered emergent Fremont cottonwood (*Populus fremontii*) and California sycamore (*Platanus racemosa*) are most closely associated with this community. Most stands are too dense for understory development. This plant community is typically found on loose, sandy, or fine gravelly alluvium soils near stream channels during flood flows. It requires repeated flooding to prevent it from converting to a more mature Southern Cottonwood-Sycamore Riparian Forest community. The CDFW lists it as a sensitive plant community. Plant species identified within the community include sandbar willow (*Salix exigua*), black willow (*Salix goodingii*), mule fat, Fremont cottonwood, Mexican fan palm (*Washingtonia robusta*), olive (*Olea europea*), phacelia (*Phacelia sp.*), and common sunflower. There was no modification necessary for this mapped plant association after the 2018 update survey.

There is a single patch of southern willow scrub that comprises approximately 0.9 acre within the central portion of the WLC site. There is no southern willow scrub in the Offsite Improvement Areas. This community is composed of a single isolated stand within a human-made, catch basin that occurs south of Alessandro Boulevard and west of Virginia Street (see Figure 4.4.2). This stand was a direct result of nuisance flow and agricultural runoff from concrete cattle containment areas adjacent to the catch basin. This area no longer receives runoff from the previous cattle facility and habitat quality is progressively getting worse due to a lack of available moisture. Therefore, this patch of habitat is considered of low-habitat value. The remainder of the southern willow scrub habitat is either within additional survey area or within the northern portion of the SJWA to the south.

h. Non-Vegetated Channel

The non-vegetated channel community occurs within the northeastern portion of the site (east of Gilman Springs Road) and the southwestern corner of the survey area, west of World Logistics Center Parkway and south of Alessandro Road and accounts for 7 acres (0.1%) of habitat within the survey area. There is no non-vegetated channel found within the WLC site and there are 2 acres of non-vegetated channel in the Offsite Improvement Areas. This habitat contains mainly cobbles and boulders along the channel bottom and banks. The substrate contains sparse sandy deposits with limited vegetative cover and therefore provides low quality habitat for sensitive plant and wildlife species. There was no modification necessary for this mapped community after the 2018 update survey.

i. Ornamental

This plant community occupies 6.0 acres or 0.1 percent of the project survey area. There are 3 acres of ornamental found within the WLC site and there is no ornamental in the Offsite Improvement Areas. There are two distinct areas within the survey area that contain ornamental vegetation. The first area is located within rural residential development just west of World Logistics Center Parkway and south of Eucalyptus Avenue. This portion of the survey area contains a stand of olive trees. The second area occurs within a human-made catch basin in the center of the WLC site and is likely naturally occurring and likely began growing several decades ago. The area with this vegetation previously contained southern willow scrub, but has naturally converted to a dense stand of salt cedar. Wildlife that uses this area has adapted to urban, agricultural, or other disturbed areas associated with human activity. The other catch basin is discussed relative to the southern willow scrub community above. The ornamental area is not associated with any native vegetation and provides only limited habitat value, primarily as cover, nesting, and perching opportunities for birds. There was no modification to this mapped plant community made after the 2018 update survey.

An ornamental plant community is typically described as a large stand of non-native ornamental trees or shrubs. These areas are often artificially created, but can be naturally occurring. Plant species vary from project site to project site, but are generally non-native and are often associated with landscape plants.

There are two distinct areas within the survey area that contain ornamental vegetation. The first area is located within rural residential development just west of World Logistics Center Parkway and south of Eucalyptus Avenue. This portion of the survey area contains a stand of olive trees. The second area occurs within a human-made catch basin in the center of the WLC site and is likely naturally occurring and likely began growing several decades ago.

The ornamental areas are not associated with any native vegetation and provides only limited habitat value, primarily as cover, nesting, and perching opportunities for birds and common terrestrial wildlife that have adapted to urban, agricultural, or other disturbed areas associated with development. This land use type comprises approximately six acres of the survey area.

j. Open Water

Open water is characterized by ponded or flowing water with little to no vegetative cover. These areas are specifically associated with freshwater drainage features and typically provide habitat for aquatic

plant and wildlife species. There is a 1.0-acre area or less than 0.1 percent of open water located in the northern portion of the SJWA. The open water areas within the survey area are artificially created ponded areas and none exists within the WLC site or the Offsite Improvement Areas. There was no modification to this mapped land cover made after the 2018 update survey.

k. Northern Mixed Chaparral

The northern mixed chaparral community is characterized by broad-leaved shrubs forming dense, often nearly impenetrable vegetation dominated by scrub oak (*Quercus dumosa*), chamise (*Adenostoma fasciculatum*), and any one of several species of manzanitas (*Arctostaphylos)* and California lilacs (*Ceanothus*). Plants are typically deep-rooted and little or no understory vegetation is present. This vegetation community is adapted to repeated fires, to which many species respond by stump sprouting. A dense cover of annual herbs may appear during the first growing season after a fire, followed in subsequent years by perennial herbs, short-lived shrubs, and reestablishment of dominance by the original shrub species. There is 1.0 acre or less than 0.1 percent of northern mixed chaparral located on a north-facing slope of the hills at the southwestern corner of the WLC site. This one (1) acre of northern mixed chaparral occurs within the WLC site. There is no northern mixed chaparral in the Offsite Improvement Areas. There was no modification necessary for this mapped plant association after the 2018 update survey.

4.4.1.3 Vegetation in the Northern Portion of the San Jacinto Wildlife Area (SJWA)

Six plant communities/land use types occur within the northern portion of the SJWA to the south: extensive agriculture (e.g., dryland farming), non-native grassland, Riversidean sage scrub, disturbed, southern willow scrub, and urban/developed. The northern portion of the SJWA consists of the fallow farmland that was placed into conservation in 2001 and surrounding portions of the 194-acre SDG&E facility. This northern portion of the SJWA has been used for agricultural pursuits over many years, but it has been left fallow for several years now and these have become non-native grassland and Riversidean sage scrub. See Table 4.4-1 for a listing of plant associations in the SJWA within the Survey Area.

4.4.1.4 Vegetation in the Indirect Impact Zone

Seven plant communities/land use types occur within the 1,636.6-acre off-site analysis zone. This area was evaluated as an additional 1,000-foot zone beyond the boundaries of the WLC site to consider potential off-site indirect impacts associated with noise, light, water quality, and air quality concerns beyond the boundary of the actual WLC site. Plant communities associated with the Indirect Impact Zone include non-native grassland, extensive agriculture, RSS, disturbed, urban/developed, mule fat scrub, and non-vegetated channel (see Figure 4.4.1). This area contains land that has been previously disturbed as a result of development and off-road vehicle trails east of Gilman Springs Road and general open space areas in the southwestern portion of the survey area.

4.4.1.5 Wildlife in the Specific Plan Area

Despite the disturbed nature of the WLC planning area (i.e., 97% non-native vegetation), common wildlife species that have adapted to human-modified landscapes are present and were observed on site, including the red-tailed hawk (*Buteo jamaicensis*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaidia macroura*), common raven (*Corvus corax*), coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Otospermophilus beecheyi*). A complete list of species observed on site is included in Appendix B of the *MSHCP Consistency Analysis* contained as an appendix to this Revised Sections of the FEIR. Utilization of agricultural areas by wildlife varies greatly depending upon the type of crop and the time of the year. Due to the amount of agricultural activities over the past decades, there is a limited number of species that are present although many species discussed above occur along the margins of the agricultural fields and along the limited drainage areas. In addition to the more common species discussed above, the San Diego gopher snake (*Pituophis cantenifer annectens*), white-tailed kite (*Elanus leucurus*), barn owl (*Tyto alba*), loggerhead

shrike (*Lanius ludovicianus*), and Botta's pocket gopher (*Thomomys bottae*) were recorded to occur within the WLC site and the off-site facility areas. There is a robust passerine bird population at the site during the growing season with a severely limited number of mammals following the harvest, largely due to the extensive disking activities.

4.4.1.6 Wildlife in the Northern Portion of the SJWA

The adjacent SJWA to the south of the WLC site has a very high diversity and abundance of bird species, and is recognized nationally and internationally for its bird population. The amount and diversity of birds in the SJWA contributes to a large degree to the number of different kinds of birds observed in the agricultural areas on the project site. Numerous bird and mammal species occur within these agricultural areas and fallow fields may provide foraging opportunities for raptors. The number of passerine birds is high and includes both year-round species and transitory birds associated with the SJWA. The number of mammals is limited probably due to the extensive agricultural pursuits of the past.

4.4.1.7 Wildlife in the Indirect Impact Zone

MBA evaluated this area using direct observations, literature reviews, and information from studies performed on adjacent areas. The area adjacent to Gilman Springs Road on the south end of the planning area was examined by MBA biologists in 2007 (unpublished Burrowing Owl Survey Report, MBA). The distribution of wildlife species at this adjacent area was similar to the WLC site and the SJWA, with a very limited distribution of mammals (primarily burrowing mammals) and a high incidence of passerine birds.

4.4.1.8 Wildlife in the SJWA and Mystic Lake

The SJWA is 20,000 acres of man-made wetlands and open water ponds and is the first state wildlife area to utilize reclaimed water to enhance its wetlands. It is located south of the WLC site and the northern portion of the SJWA adjacent to the WLC site was included in the Survey Area. This northern portion of the SJWA is included in the Survey Area because it is adjacent to the WLC site. The SJWA contains several habitat areas, including wetlands, restored riparian habitat, grasslands, sage scrub, and marshes and provides habitat for the several threatened and endangered wildlife species including Stephens' kangaroo rat, Swainson's hawk, and bald eagle. The SJWA contains an important inland wetland, which provides habitat for many wetland plant species and wildlife species including aquatic birds, amphibians, and fish. According to the CDFW:

> *"The San Jacinto Wildlife Area public lands currently total about 20,000 acres. The Wildlife Area shares a common boundary with the 8,800-acre Lake Perris State Recreation Area. The majority of the Wildlife Area is located in unincorporated Riverside County. The northern portion of the Wildlife Area is included within the city limits of Incorporated City of Moreno Valley. Davis Road, an unimproved dirt road, bisects the Wildlife Area in a north-south direction. This roadway is maintained by DFG on the north and the County of Riverside on the south. Surrounding land users are primarily involved in agriculture principally dry land wheat farming and dairy operations. The private lands immediately north of the Wildlife Area are currently farmed and are included within the City of Moreno Valley jurisdiction. The 150-acre Double Bar "S" Horse Ranch represents the only substantial in-holding within the current Wildlife Area boundary. To the east lies Mystic Lake bed, the most northern portion of which has recently been Incorporated into the Wildlife Area. The south eastern parts of the lake bed remain in private ownership and are used for agriculture when not inundated with flood waters from the San Jacinto River. Numerous privately owned hunt clubs (waterfowl and game bird hunting clubs) are also located on the current eastern boundary of the Wildlife Area. The unincorporated rural communities of Lakeview and Nuevo are located to the south. Much of the land on the immediate southern boundary of the Wildlife Area is currently farmed by the Amway Corporation Nutrilite Division."*

The SJWA is a significant resource for avian species and other wildlife. In 1981–82, the State Wildlife Conservation Board initially purchased 15,000 acres of the Mystic Lake area as mitigation for habitat impacts associated with the construction of the State Water Project (SWP).

Mystic Lake. This is a large crescent-shaped, intermittent water body within the SJWA, which serves as a significant wetland habitat for numerous birds including migratory waterfowl such as ducks, grebes, and occasional geese. Seasonal upland game hunting is allowed within the SJWA and Lake Perris State Recreation Area. Other uses of the SJWA include wildlife observation, nature study, fishing, hiking, photography, field trials, hunting dog training classes, and conservation of wildlife and wildlife habitat. Bird species commonly found at various times of the year in the SJWA include a wide variety of ducks, shore birds and gulls, upland game species, and a variety of passerine birds including those found in the WLC site.

4.4.1.9 Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP for western Riverside County is an element of the Riverside County Integrated Project (RCIP), which is an integration of land use, transportation, and conservation planning and implementation to develop a consensus for the future development of Riverside County. The MSHCP is designed to protect over 150 species and conserve over 500,000 acres of land in western Riverside County. The MSHCP was conceived, developed, and is being implemented specifically to address the direct, indirect, cumulative, and growth-related effects on covered species resulting from build out of planned land use and infrastructure, including the project.

The MSHCP involves efforts by the County, State, and Federal governments, the fourteen cities in western Riverside County, and private and public entities engaged in construction activities that potentially affect the species covered under the MSHCP. The plan specifies an obligation of local projects, both public and private, to mitigate their impacts on species. The MSHCP includes incentives for conservation or the purchase of properties from willing sellers and will eventually result in a Conservation Area in excess of 500,000 acres, focusing on conservation of 146 species. The MSHCP Conservation Area includes approximately 347,000 acres of existing Public/Quasi-Public Lands and approximately 153,000 acres of Additional Reserve Land.

The MSHCP Conservation Area is made up of existing and proposed “Core” areas, or large assemblages of public land that contain important habitat and listed or sensitive species populations. The core areas are connected by a series of “linkages” or “corridors” identified across public and private lands to allow wildlife movement and genetic connectivity and diversity among the core areas. The MSHCP identifies conservation areas through a series of “criteria cells” within which certain biological resources (i.e., vegetation and/or physical features) should be preserved over the long term. The MSHCP also establishes various processes to evaluate land development proposals in light of its goals and requirements. The MSHCP also identifies when studies need to be performed within certain criteria cells to determine the presence or absence of listed or otherwise sensitive species of plants or animals.

The project site is located within the Reche Canyon/Badlands Area Plan of the MSHCP. Portions of the WLC site occur in 3criteria cells of the MSHCP. Therefore, the project applicant, the City, and the County[1] are required to use the Habitat Acquisition Negotiation Strategy (HANS) process established in the MSHCP to identify and acquire habitat as part of the development review process. The HANS process involves negotiations between a landowner and the Western Riverside County Regional Conservation Authority (RCA) so the County can acquire land with important habitat or other biological resources while providing fair compensation and/or reasonable development opportunities on the remaining land for the landowner.

[1] Western Riverside County Regional Conservation Authority (RCA)

MSHCP Proposed Core 3 is located to the north and east of the WLC site, and Existing Core H is located to the south. Small portions of the WLC site fall within both Core Areas (see Figure 4.4.3). No existing or proposed linkage or constrained linkage areas are within or adjacent to the WLC site.

The 2013 habitat assessment and DBESP focused on sensitive resources that could potentially occur in the overall planning area, including nine Criteria Area plant species, burrowing owl (*Athene cunicularia*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*).

4.4.1.10 Endangered, Threatened, and Special Status Species

It is typical to base the presence or likelihood of presence of sensitive species within a specific area on the following criteria:

- Direct observation of the species or its sign in the WLC site or immediate vicinity during site-specific surveys or reported in previous biological studies;
- Sighting by other qualified observers;
- Record reported by the Natural Diversity Data Base (NDDB) published by the CDFW; and/or
- Presence or location of specific species lists provided by private groups (e.g., California Native Plant Society - CNPS).

Threatened and Endangered Species. The USFWS and the CDFW list species as threatened or endangered under the Federal and California Endangered Species Acts (FESA and CESA, respectively). An endangered species is one that is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future.

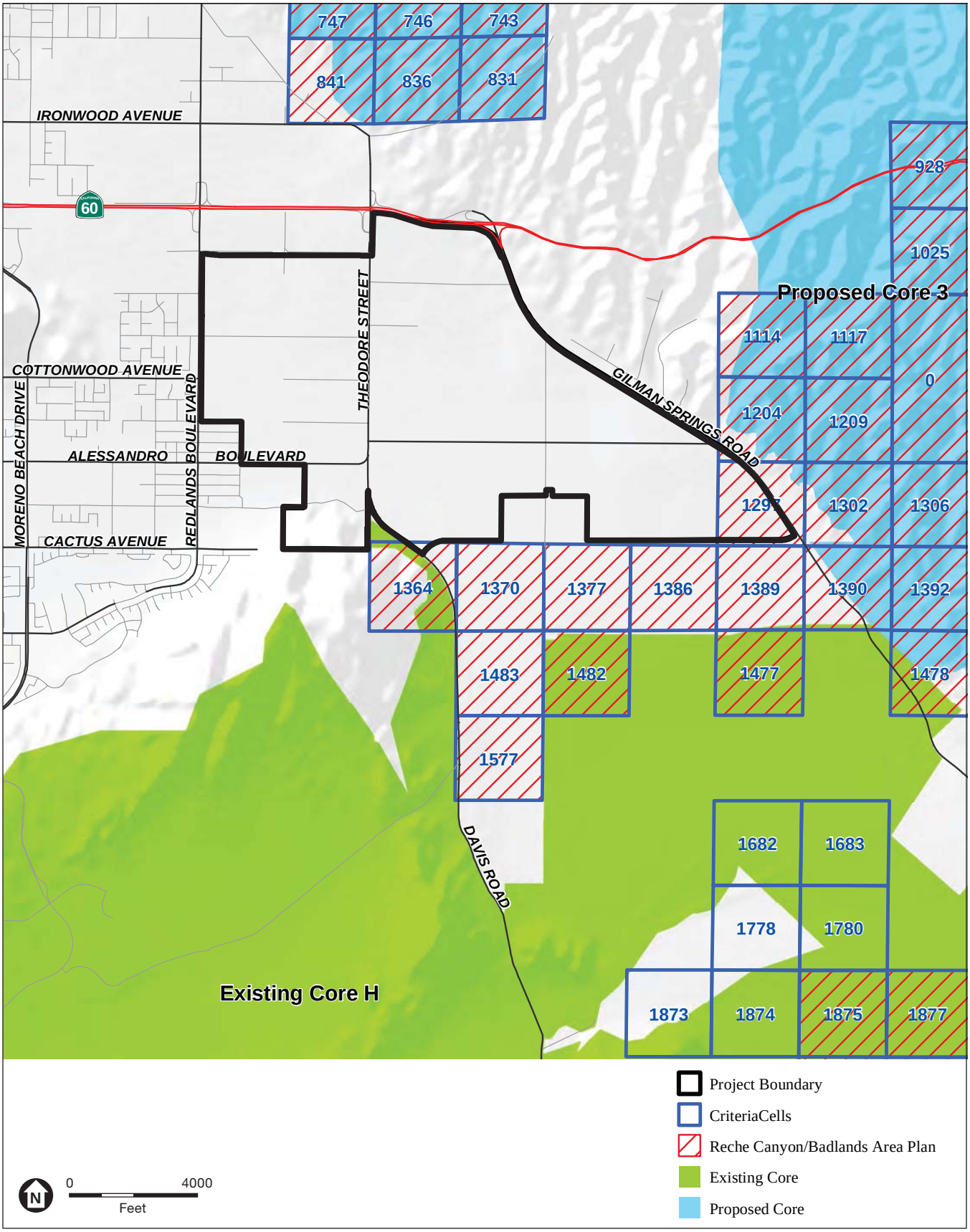
The USFWS may designate "critical habitat" that identifies specific areas, both occupied and unoccupied, that are often necessary to the conservation of a listed species. To make a determination of Critical Habitat, biologists consider physical and biological habitat features needed for life and successful reproduction of the species which include:

- Space for individual and population growth and for normal behavior;
- Cover or shelter;
- Food, water, air, light, minerals, or other nutritional or physiological requirements;
- Sites for breeding and rearing offspring; and
- Habitats that are protected from disturbances or are representative of the historic geographical and ecological distributions of a species.

Critical Habitat areas may require special management considerations or protections.

The project site is not located within any USFWS designated Critical Habitat area, and no threatened or endangered species were observed within the project site during the previous field surveys. However, the threatened coastal California gnatcatcher was observed in the northeastern portion of the project survey area during the 2018 focused surveys.

Table 4.4-2 identifies special status plant species identified in the City's *General Plan Final EIR,* and in searches of the CDFW's *California Natural Diversity Data Base* (CNDDB) and the CNPS's *Electronic Inventory of Rare and Endangered Vascular Plants of California* that may potentially occur in the project survey area, and a statement as to whether they were identified onsite.



SOURCE: County of Riverside GIS 2017

World Logistics Center Project

Figure 4.4-3
MSHCP Areas

ESA

Federally Endangered Plant Species. As shown in Table 4.4-2, two federally endangered plant species, San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) and slender-horned spineflower (*Dodecahema leptoceras*), were analyzed for their potential to occur in the WLC site and the off-site facilities. No evidence of these plant species was found during reconnaissance-level surveys. In addition, no suitable habitat for this species occurs on site due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native, low-quality vegetation. No additional federally endangered plant species were analyzed for potential to occur in the WLC site and off-site facilities because no additional federally endangered plant species are known to occur on, or in the vicinity of, the site. No suitable habitat was found in the WLC site or off-site facilities to support other federally endangered plant species. Therefore, federally endangered plant species are not likely to occur in the WLC site or off-site facilities.

Federally Threatened Plant Species. As shown in Table 4.4-2, one federally threatened plant species, thread-leaved brodiaea (*Brodiaea filifolia*), was analyzed for its potential to occur in the WLC site. No evidence of this federally threatened plant species was found and no suitable habitat for this federally threatened plant species occurs on site due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federally threatened plant species were analyzed for their potential to occur in the WLC site because no additional federally threatened plant species are known to occur on, or in the vicinity of, the site. No suitable habitat was found during the site surveys to support other federally threatened plant species. Therefore, federally threatened plant species are not likely to occur in the WLC site.

Federally Proposed Endangered, Proposed Threatened, Federal Candidate, and Federal Plant Species of Concern. The USFWS has developed several categories for sensitive species not yet determined to have reached endangered or threatened status. Generally, federally proposed endangered or threatened species are species considered unofficially endangered or threatened (i.e., final regulatory action formally listing such species has not yet occurred). Federal candidate species are species who are candidates for becoming listed as endangered or threatened, and Federal species of concern are species whose numbers are considered low enough to have approached Federal candidate status.

Federally Protected Plant Species. As shown in Table 4.4-2, no Federal plant species of concern were analyzed for their potential to occur in the WLC site and off-site facilities because no evidence of any Federal plant species of concern was found in the WLC site, nor was any suitable habitat found due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation.

Federally Endangered Wildlife Species. As shown in Table 4.4-3, four federally endangered wildlife species were analyzed for potential to occur in the WLC site or off-site facilities: Riverside fairy shrimp (*Streptocephalus woottoni*), southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and Stephens' kangaroo rat (*Dipodomys stephensi*). No evidence of any federally endangered wildlife species was found in the WLC site or off-site facilities. Stephens' kangaroo rat is the only federally listed wildlife species potentially occurring on site. Although no sign of Stephens' kangaroo rat was identified during the site surveys, it was determined that this species may range through the general area. This species is commonly found in ruderal and minimally disturbed areas. Low quality habitat was observed along existing roadsides.

Table 4.4-2: Sensitive Plant Species in the WLC site

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS		CNPS					
Atriplex coronata var. *notatior*	San Jacinto valley crownscale	FE	—	1B.1	Occurs in playas, chenopod scrub, grasslands, and vernal pools. Specifically found in dry alkali flats in the San Jacinto River Valley. Elevation limits: 1,200 to 1,500 feet.	Annual herb	Apr to Aug	Covered	**Not Likely to Occur.** No alkali flats occur in the WLC site. Recorded approximately 2.5 miles southeast of the WLC site (CNDDB 2012) and 1.5 miles south of the study area boundary (RCA 2013).
Brodiaea filifolia	Thread-leaved brodiaea	FT	SE	1B.1	Occurs in coastal scrub, cismontane woodland, grasslands, and vernal pools. Usually associated with annual grassland and vernal pools in clay soils. Elevation limits: 75 to 2,500 feet.	Perennial herb bulbiferous	Mar to Jun	Covered	**Not Likely to Occur.** No clay soils or vernal pools occur in the WLC site. Recorded approximately 5 miles south of the WLC site (CNDDB 2012) and 4 miles south according to the BMP (RCA 2013).
Calochortus plummerae	Plummer's mariposa lily	—	—	4.2	Occurs in coastal scrub, chaparral, grasslands, cismontane woodlands, and lower montane coniferous forests. Found in rocky and sandy soils, usually of granitic or alluvial material. Very common after fire. Elevation limits: 300 to 4,500 feet.	Bulbiferous herb	May to Jul	Not Covered	**Moderate Potential to Occur.** The portion of the WLC site that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 2 miles east of the WLC site. (CNDDB 2012)

Table 4.4-2: Sensitive Plant Species in the WLC site

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS		CNPS					
Centromadia pungens ssp. *laevis*	Smooth tarplant	—	—	1B.1	Occurs in grasslands, chenopod scrub, meadows, playas, and riparian woodland. Prefers alkali meadow and alkali scrub. Elevation limits: 0 to 1,500 feet.	Annual herb	Apr to Sep	Covered	**Not Likely to Occur.** No alkali soils occur in the WLC site. Recorded approximately 3 miles west of the WLC site (CNDDB 2012) and 2.5 miles south by the BMP (RCA 2013).
Chorizanthe parryi var. *parryi*	Parry's spineflower	—	—	1B.1	Occurs in coastal scrub and chaparral. Found on dry slopes and flats, sometimes at interface of two vegetation types, on dry, sandy soils. Elevation limits: 150 to 5,000 feet.	Annual herb	Apr to Jun	Covered	**Moderate Potential to Occur.** The portion of the WLC site that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 4.5 miles northwest of WLC site. (CNDDB 2012)
Dodecahema leptoceras	Slender-horned spineflower	FE	SE	1B.1	Occurs in chaparral and alluvial fan sage scrub. Prefers flood deposited terraces and washes. Elevation limits: 600 to 2,300 feet.	Annual herb	Apr to Jun	Covered	**Low Potential to Occur.** The WLC site contains several natural drainages; one contains a mixture of RSS and mule fat scrub. The remaining drainages are generally devoid of vegetation. Recorded approximately 7 miles northwest of the WLC site. (CNDDB 2012)
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	—	—	1B.1	Occurs in coastal salt marshes, playas, grasslands, and vernal pools. Usually found on alkali soils in playas, sinks, and grasslands. Elevation limits: 1 to 4,500 feet.	Annual herb	Feb to Jun	Covered	**Not Likely to Occur.** No alkali soils, marshes, or vernal pools occur in the WLC site. Observed approximately 2 miles south of WLC site (CNDDB 2012) and as close as 0.75 mile to the south of the WLC site study area according to the BMP (RCA 2013).

Table 4.4-2: Sensitive Plant Species in the WLC site

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS		CNPS					
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	—	—	4.3	Occurs in chaparral and coastal scrub on dry soils. Elevation limits: 1 to 3,000 feet.	Annual herb	Jan to Jul	Not Covered	**Low Potential to Occur.** The portion of the WLC site that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 7 miles northwest of WLC site. (CNDDB 2012)
Nama stenocarpum	Mud nama	—	—	2B.2	Occurs in marshes, swamps, lakeshores, riverbanks, and intermittently wet areas. Elevation limits: 15 to 1,500 feet.	Annual/ perennial herb	Jan to Jul	Covered	**Not Likely to Occur.** No lakes, marshes or riverine areas occur in the WLC site. The drainage features onsite do not remain wet long enough to be considered suitable habitat. Recorded approximately 2.5 miles southeast of WLC site. (CNDDB 2012)
site	San Bernardino aster	—	—	1B.2	Occurs in meadows, seeps, marshes, swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and grasslands. Found in vernally mesic areas near ditches, streams, and springs. Elevation limits: 6 to 6,000 feet.	Rhizoma-tous herb	Jul to Nov	Not Covered	**Not Likely to Occur.** The ditches and erosion features in the WLC site are heavily disturbed. Recorded 2.5 miles northeast of the WLC site. (CNDDB 2012)

Table 4.4-2: Sensitive Plant Species in the WLC site

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS		CNPS					
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	—	—	2B.1	Occurs in marshes and swamps, riparian forest, meadows, seeps, and vernal pools. Found in mud flats of vernal lakes, drying riverbeds, and alkali meadows. Elevation limits: 10 to 1,300 feet.	Annual herb	May to Sep	Covered	**Not Likely to Occur.** No marshes, riverine or vernal pool areas occur in the WLC site. Recorded approximately 4 miles south of the WLC site. (CNDDB 2012)

U.S. Fish and Wildlife Service
FE Federal Endangered
FT Federal Threatened
PE Proposed Endangered
PT Proposed Threatened
FC Federal Candidate
FSC Species of Concern*
*No longer recognized as a Federal designation.

California Department of Fish and Wildlife
CE California Endangered
CT California Threatened
CR California Rare

California Native Plant Society
1A Plants presumed extinct in California.
1B Plants rare, threatened, or endangered in California and elsewhere.
2A Plants presumed extinct in California, but more common elsewhere.
2B Plants rare, threatened, or endangered in California, but more common elsewhere.
3 Plants about which we need more information.
4 Plants of limited distribution.

Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the WLC site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the WLC site.
Low Potential to Occur - There is a historical record of the species in the vicinity of the WLC site and potentially suitable habitat onsite, but existing conditions (e.g., density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.
Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the WLC site, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the WLC site (within 3 miles).
Species Present - The species was observed in the WLC site at the time of the survey or during a previous biological survey.

Source: Habitat Assessment, MSHCP Consistency Analysis, and HANS report, Michael Brandman Associates, September 2014 and ESA, May 2018.

Since the WLC site is within the known range of this species and low quality habitat was identified on site, there is a moderate potential for Stephens' kangaroo rat to occupy some portion of the WLC site or off-site facilities.

No suitable habitat for Riverside fairy shrimp, southwestern willow flycatcher, and least Bell's vireo, occurs on site due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federally endangered wildlife species were analyzed in Table 4.4C for their potential to occur in the WLC site because no additional federally endangered wildlife species are known to occur on, or in the vicinity of, the site.

Federally Threatened Wildlife Species. As shown in Table 4.4-3, Coastal California gnatcatcher (*Polioptila californica californica*) is known to occur within moderate to high quality coastal sage scrub in the general area and some suitable habitat occurs on site for coastal California gnatcatcher. There is marginal Riversidean sage scrub in the northern portion of the project site near SR-60 and Gilman Springs Road and in the proposed Open Space Area adjacent to the Lake Perris State Recreation Area (LPSRA) south of Brodiaea Avenue, west of World Logistics Center Parkway and east of Redlands Boulevard. Coastal California gnatcatcher was observed by ESA on the WLC site in coastal sage scrub habitat south of SR-60 near Gilman Springs Road in 2018. No additional federally threatened wildlife species were analyzed for their potential to occur in the WLC site.

Federally Proposed Endangered, Proposed Threatened, Federal Candidate, and Federal Species of Concern. The USFWS has developed several categories for sensitive species not yet determined to have reached endangered or threatened status. Generally, federally proposed endangered or threatened species are species considered unofficially endangered or threatened (i.e., final regulatory action formally listing such species has not yet occurred). Federal candidate species are species who are candidates for becoming listed as endangered or threatened, and Federal species of concern are species whose numbers are considered low enough to have approached Federal candidate status. The western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is the only Federal Candidate Species with a potential to occur in this area, but this species is not likely to occur in the WLC site and off-site facilities. In addition, it is a covered species under the MSHCP.

Federally Protected Wildlife Species. There was only one Federal wildlife species of concern analyzed for its potential to occur in the WLC site and off-site facilities (see the western yellow-billed cuckoo discussed above). No evidence of any other Federal wildlife species of concern was found in the WLC site nor does any suitable habitat occur due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional Federal wildlife species of concern were analyzed for potential to occur in the WLC site because no additional Federal wildlife species of concern are known to occur on, or in the vicinity of, the site.

California State Endangered Plant Species. As shown in Table 4.4-2, two California State endangered plant species were analyzed for their potential to occur in the WLC site and off-site facilities: slender-horned spine-flower and thread-leaved brodiaea. No evidence of these State-listed plant species was found in the WLC site nor is there any suitable habitat for these State-listed plant species due to regular disking of the site and dominance of sparse, non-native low-quality vegetation. No additional State-listed plant species were analyzed for potential to occur in the WLC site because no additional State-listed plant species are known to occur on, or in the vicinity of, the site, nor was any suitable habitat found to support other State-listed plant species. Therefore, State-listed plant species are not likely to occur in the WLC site and there is no potential impact to State endangered plant species.

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Branchiopods							
Streptocephalus woottoni	Riverside fairy shrimp	FE	—	CDFW: CSC	Occurs in tectonic swales and earth slump basins in grassland and coastal sage scrub. Inhabits seasonally astatic pools filled by winter/spring rains. Hatches in warm water later in the season.	Covered	**Not Likely to Occur.** No vernal pools occur in the WLC site. Observed farther than 5 miles south of the WLC site.
Reptiles and Amphibians							
Aspidoscelis hyperythra	Orange-throated whiptail	—	—	CDFW: CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Also near perennial plants where termites, its major food, can be found.	Covered	**Low Potential to Occur.** Limited coastal scrub is present in the WLC site. Woody vegetation onsite is very sparse and is not considered sufficient to support the species. The nearest occurrence of the species was recorded approximately 0.3 mile north of the WLC site; however, in the eighteen years since the observation, the previous site conditions have changed to become unsuitable habitat (CNDDB 2012).
Crotalus ruber ruber	Northern red-diamond rattlesnake	—	—	CDFW: CSC	Inhabits chaparral, woodland, grassland, and desert habitats. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	Covered	**Not Likely to Occur.** No rocky areas and dense native plant communities occur in the WLC site and the site is regularly disturbed. Recorded approximately 1-mile south of the WLC SITE; however, the observation occurred over 80 years ago (CNDDB 2012). The BMP has recently found the species in the same area as the CNDDB sighting (RCA 2013)
Phrynosoma blainvillei	Coast horned lizard	—	—	CDFW: CSC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climates. Prefers friable, rocky, or shallow sandy soils.	Covered	**Low Potential to Occur.** The portion of the WLC site that contains sandy soils or rocky soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 4 miles northwest of the WLC site (CNDDB 2012)

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Spea hammondii	Western spadefoot	—	—	CDFW: CSC	Occurs primarily in grassland habitats, but also found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Covered	**Not Likely to Occur.** No vernal pools or native woodlands occur in the WLC site. Recorded approximately 2 miles south and west of the WLC site (CNDDB 2012). The BMP studies have occurrences approximately 0.7 mile south of the study area boundary (RCA 2013)
Birds							
Agelaius tricolor	Tricolored blackbird	—	—	CDFW: CSC	Highly colonial species. Requires open water, protected nesting substrate, and foraging areas with insect prey within a few miles of the colony.	Covered	**Low Potential to Occur.** No open water or protected nesting habitat is located in the WLC site. Numerous nesting pairs were recorded within the wheat fields on the southeastern portion of the WLC site in 1995. The wheat has since been removed and no suitable nesting vegetation remains (CNDDB 2012).
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	—	—	CDFW: CSC	Resident in coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Covered	**Low Potential to Occur.** While sparse RSS and chaparral are present within the WLC site, no steep slopes are present in the WLC site. Recorded approximately 4 miles west of the WLC site (CNDDB 2012). The BMP database has the species less than 1.0 mile from the WLC SITE study area boundary (RCA 2013).
Amphispiza belli belli	Bell's sage sparrow	—	—	CDFW: CSC	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in southern portion of range. Nests typically located on the ground beneath shrub or in shrub 6 to 18 inches above ground.	Covered	**Not Likely to Occur.** No dense stands chaparral or coastal sage scrub vegetation occurs in the WLC site. Recorded approximately 4 miles northwest of the WLC site (CNDDB 2012) and according to the BMP 4 miles south of the WLC site study area (RCA 2013).

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
site	Burrowing owl	—	—	CDFW: CSC	Occupies burrows in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Covered	**Present.** Despite the heavy disturbance the WLC site contains flat topography with sparse, low-lying vegetation and various California ground squirrel burrows. Observed within the WLC site in 2005; however, focused surveys conducted in 2010 and 2012 found the WLC site and surroundings to be unoccupied. The 2013 survey of the WLC site again found a pair of owls (MBA 2013b); however, the 2018 ESA survey found only a single owl.
Aquila chrysaetos	Golden eagle	—	—	CDFW: FP	Open mountains, foothills, plains.	Covered	**Low Potential to Occur.** The WLC site contains open flat area that is considered marginally suitable foraging habitat, but not suitable nesting habitat. Recorded approximately 1 mile south of the WLC site (RCA 2013)
Buteo swainsonii	Swainson's hawk	—	ST	—	Grasslands and riparian areas	Covered	**Low Potential to Occur.** The WLC site contains open flat area that is considered marginally suitable foraging habitat, but not suitable nesting habitat. Recorded approximately 1 mile south of the WLC site (RCA 2013)
Buteo regalis	Ferruginous hawk	—	—	CDFW: CSC	Winters in open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats.	Covered	**Low Potential to Occur.** The WLC site contains open flat area that is considered marginally suitable foraging habitat, but no suitable nesting habitat. Recorded approximately 1 mile northeast of the WLC site (CNDDB 2012) and 2 miles south of the WLC site according to BMP records (RCA 2013).

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FC	SE	—	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Specifically nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLC site. Recorded approximately 5.5 miles northwest of the WLC site (CNIDDB 2012).
Elanus leucurus	White-tailed kite	—	—	CDFW: FP	Nests in rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Prefers open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Covered	**Present.** The WLC site contains suitable foraging habitat, but few dense-topped trees occur in the vicinity of the site. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP indicates that the species is found 1.0 mile from the WLC site study area boundary (2013). Species was observed foraging within the southern portion of the survey area adjacent to the SJWA and was observed in the western portion of the survey area in 2018.
Empidonax traillii extimus	Southwestern willow flycatcher	FE	SE	—	Nests in riparian woodlands in southern California.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLC site. Recorded approximately 6.5 miles east of the WLC site (CNDDB 2012).
Eremophila alpestris actia	California horned lark	—	—	CDFW: CSC	Inhabits short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Covered	**Present.** The WLC SITE contains flat, fallow grain fields that constitute suitable nesting habitat. Observed in the WLC site during the reconnaissance-level surveys (MBA 2012) but not seen in 2018.

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Falco columbarius	Merlin	—	—	CDFW: CSC	Winters in seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Covered	**Low Potential to Occur.** Portions of the WLC site contain windbreak trees and open farmland. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP database has the species less than a mile south of the WLC site study area (RCA 2013).
Falco mexicanus	Prairie falcon	—	—	CDFW: CSC	Inhabits dry, open terrain, either flat or hilly. Breeding sites located on cliffs.	Covered	**Low Potential to Occur.** The WLC site contains marginally suitable foraging habitat but no suitable nesting habitat. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012).
Falco peregrinus anatum	Peregrine falcon	FD	SE	CDFW: FP	Nests near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Covered	**Low Potential to Occur.** The WLC site contains marginal nesting habitat. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP indicates the species is within 1.0 mile of the southern boundary of the study area (RCA 2013).
Icteria virens	Yellow-breasted chat	—	—	CDFW: CSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Specifically nests in low, dense riparian vegetation, consisting of willow, blackberry, wild grape. Forages and nests within 10 feet of ground.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLC site. Recorded approximately 5.5 miles northwest of the WLC site (CNDDB 2012).

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Lanius ludovicianus	Loggerhead shrike	—	—	CDFW: CSC	Inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Covered	**Present.** The WLC site contains flat, open area that is suitable foraging habitat but not suitable nesting habitat. Observed by MBA during previous surveys, approximately within the WLC site (MBA 2012) but not observed by ESA in 2018.
Plegadis chihi	White-faced ibis	—	—	CDFW: CSC	Rookery sites include shallow freshwater marshes. Nests in dense tule thickets interspersed with areas of shallow water for foraging.	Covered	**Not Likely to Occur.** No marshes or bodies of water occur in the WLC site. Recorded approximately 3 miles southeast of the WLC site (CNDDB 2012).
Polioptila californica californica	Coastal California gnatcatcher	FT	—	CDFW: CSC	Obligate, permanent resident of coastal sage scrub below 2,500 feet in southern California. Prefers low coastal sage scrub in arid washes and on mesas and slopes.	Covered	**Present.** There is limited and sparse coastal sage scrub vegetation occurring in the WLC site. Previously recorded approximately 4 miles northwest of the WLC site (CNDDB 2012) and less than 0.5 mile of the WLC site study area according to BMP (RCA 2013). Observed within the WLC site by ESA during 2018 update surveys.
Vireo bellii pusillus	Least Bell's vireo	FE	SE	—	Summer resident in low riparian vegetation in the vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, and mesquite.	Covered	**Not Likely to Occur.** No riparian plant communities or significant riparian vegetation occur in the WLC site. Recorded approximately 3 miles northeast of the WLC site (CNDDB 2012) and was recorded by the BMP at 2 miles from the closest WLC site border (RCA 2013).

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Mammals							
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	—	—	CDFW: CSC	Inhabits coastal scrub, chaparral, and grasslands. Prefers sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Covered	**Present.** Sandy to loamy soils occur in the WLC site. There are limited areas of RSS and chaparral and herbaceous areas are severely limited due to agricultural activities. Species was trapped within Drainage 9 (MBA 2013).
Dipodomys stephensi	Stephens' kangaroo rat	FE	ST	—	Primarily found in annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass, and filaree. Will burrow into firm soil.	Covered under SKRHCP	**Moderate Potential to Occur.** The WLC site contains areas similar to grasslands with very sparse canopy, but is heavily disturbed. Recorded approximately adjacent to the general WLC site on the west and south (CNDDB 2012).
Lasiurus xanthinus	Western yellow bat	—	—	CDFW: CSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats below 1,800 feet. Roosts in trees.	Not Covered	**Not Likely to Occur.** No riparian or native plant communities occur in the WLC site. Recorded approximately 3.5 miles southwest of the WLC site (CNDDB 2012).
Lepus californicus bennettii	San Diego black-tailed jackrabbit	—	—	CDFW: CSC	Inhabits coastal sage scrub habitats. Specifically, intermediate canopy stages of shrub, open shrub, herbaceous and tree, and herbaceous edge habitats.	Covered	**Present** Recorded within the MWD lands in the northern portion of the WLC site during burrowing owl surveys (MBA 2013) but not observed in 2018.
Onychomys torridus ramona	Southern grasshopper mouse	—	—	CDFW: CSC	Inhabits desert areas, especially scrub habitats with friable soils. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Not Covered	**Not Likely to Occur.** No shrub or scrub habitat occurs in the WLC site. Additionally, the site is regularly disturbed by disking. Recorded approximately 4 miles southeast of the WLC site (CNDDB 2012).

Table 4.4-3: Sensitive Wildlife Species in the WLC Site

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Perognathus longimembris brevinasus	Los Angeles pocket mouse	—	—	CDFW: CSC	Inhabits lower elevation grasslands and coastal sage communities. Prefers open ground with fine sandy soils.	Covered	**Low Potential to Occur.** The sandy soils that occur in the WLC site are limited to existing drainages with the proper coastal sage communities. Three years of trapping did not produce any Los Angeles pocket mice. Recorded approximately 3 miles south of the WLC site (CNDDB 2012). It was observed in BMP trapping within 2 miles of the study area (RCA 2013).
Taxidea taxus	American badger	—	—	CDFW: CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents.	Not covered	**Low potential to occur.** The WLC site contains limited amounts of vegetation and the ground is cultivated. Recorded approximately 8.5 miles northwest of the WLC site (CNDDB 2012). RCA data lists the closest recorded occurrence within the badlands area north and east of the project site.

Federal
FE Federal Endangered
FT Federal Threatened
FSC Federal Species of Concern
PFT Proposed Federal Threatened
FC Candidate for Federal Listing
FD Delisted

State
SE State Endangered
ST State Threatened

Other
CDFW: CSC California Species of Special Concern
CDFW: FP Fully Protected Species
CDFW: P Protected Species

Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the WLC site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site.
Low Potential to Occur - There is a historical record of the species in the vicinity of the WLC site and potentially suitable habitat onsite, but existing conditions (e.g., density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.
Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the WLC site, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the WLC site (within 3 miles).
Species Present - The species was observed in the WLC site at the time of the survey or during a previous biological survey.

Source: Habitat Assessment, MSHCP Consistency Analysis, and HANS report, Michael Brandman Associates, September 2014 and ESA, May 2018.

California State Threatened Plant Species. As shown in Table 4.4-2, no California State threatened plant species are known to occur on, or in the vicinity of, the project site and no suitable habitat occurs within the project are for any California State threatened plant species. Therefore, California State threatened plant species are not likely to occur in the WLC site and there is no potential impact to State threatened plant species.

California State Endangered Wildlife Species. As shown in Table 4.4.-3, four California State endangered wildlife species were analyzed for their potential to occur in the WLC site and off-site facilities: western yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, and peregrine falcon (*Falco peregrinus anatum*). No evidence of these California State endangered wildlife species was found in the WLC site. In addition, no suitable habitat for these species occurs within the WLC site due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional California State endangered wildlife species were analyzed for potential to occur in the WLC site because no additional California State endangered wildlife species are known to occur on, or in the vicinity of, the site. No suitable habitat was found in the WLC site to support other California State endangered wildlife species. Therefore, California State endangered wildlife species are not likely to occur in the WLC site and there is no potential impact to State endangered wildlife species.

California State Threatened Wildlife Species. As shown in Table 4.4-3, two California State threatened wildlife species was analyzed for its potential to occur in the WLC site: Swainson's hawk (*Buteo swainsonii*) and Stephens' kangaroo rat. There is little to no nesting habitat within the WLC SITE for Swainson's hawk and marginal quality foraging habitat. This species is known to occur within the adjacent SJWA and has a low potential to occur within the WLC site project site. Although no sign of Stephens' kangaroo rat was identified in the WLC site, it is concluded that this species may range through the general area. This species is known to occur in ruderal and minimally disturbed areas. Marginal habitat for Stephens' kangaroo rat was observed along existing roadsides and within active pasture areas. Since the WLC site is within the known range of this species, and marginal habitat was identified on site, there is a moderate potential for Stephens' kangaroo rat to occupy some portion of the area.

No other California State threatened wildlife species are known to occur on, or in the vicinity of, the WLC site. No suitable habitat was found in the WLC site to support other California State threatened wildlife species. Therefore, except for the Stephens' kangaroo rat, California State threatened wildlife species are not likely to occur in the WLC site and there is no potential impact to California State threatened wildlife species.

California State Fully Protected Species. The classification of Fully Protected was California's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. The list of fully protected species included fish, mammals, amphibians, reptiles, birds, and mammals. Most fully protected species are currently listed as threatened or endangered species under the more recent endangered species laws and regulations.

Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

As shown in Table 4.4-3, three California State Fully Protected species were analyzed for their potential to occur in the WLC site: golden eagle (*Aquila chrysaetos*), white-tailed kite (*Elanus leucurus*) and peregrine falcon. No suitable nesting habitat for golden eagle, white-tailed kite or peregrine falcon occurs within the area due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. However, agricultural land does represent marginal quality foraging habitat within the WLC site project site and adjacent SJWA. No additional California State fully protected wildlife species were analyzed for their potential to occur in the WLC site because no additional California State fully protected wildlife species are known to occur on, or in the vicinity of, the site. No suitable habitat was found in the WLC site and off-site facilities to support other California State

fully protected wildlife species. Therefore, California State fully protected wildlife species are not likely to occur in the WLC site and there is no impact to California State fully protected wildlife species.

California Rare Plants Species and California Species of Concern. California Species of Concern (CSC) applies to animals not listed under the FESA or CESA, but are declining at a rate that could result in Federal or State listing or historically occur in low numbers and known threats to their persistence currently exist.

California Rare Plant Species. No California rare plant species are known to occur on, or in the vicinity of, the WLC site nor is any suitable habitat known to occur within the area. Therefore, no California rare plant species were analyzed for their potential to occur in the WLC site. Eleven special status plant species, as determine by the California Native Plant Society, were identified as potentially occurring within the WLC site. Three of the species (Plummer's mariposa lily [*Calochortus plummerae*], Robinson's pepper-grass [*Lepidium virginicum* var. *robinsonii*], and San Bernardino aster [*Symphyotrichum defoliatum*]) are not covered by the MSHCP. Plummer's mariposa lily and Robinson' pepper-grass have a moderate to low potential to occur based on habitat type and soils requirements. These species were not identified during sensitive plant surveys (MBA 2010; ESA 2018).

The 2010 sensitive plant survey was conducted based on the 2010 site boundary and the then-current existing conditions. Several areas within the current WLC site were not surveyed because they were either not included in the proposed development footprint (such as the Off-site Improvement Areas) or were not within areas of suitable habitat. Therefore, areas that contained suitable habitat, but are outside of the proposed development footprint, or areas that were not accessible during the survey, were not included. Since all areas of the WLC site were not surveyed, additional plant surveys are recommended on a project-by-project basis. There has been below-average rainfall in the area since the 2010 plant surveys were conducted. Project-level surveys will be required prior to submittal of the CEQA documents as part of the project-specific environmental review process.

The Sensitive Plant Focused Survey Report only discusses the plant communities in which focused plant surveys were conducted. Many of the areas within the Extensive Agricultural Areas and the Urban/Developed areas contain elements of Riversidean sage scrub, non-native grasslands, and riparian habitat, but not in a sufficient amount to be considered a separate plant community. The remaining nine plant communities found within the WLC site, either do not provide suitable habitat or are not within the project impact area; these plant communities will not be directly or indirectly impacted by project development.

Updated focused plant surveys will likely be warranted on a project-level basis, especially if existing site conditions change over time. However, updated focused plant surveys in 2018 did not observe any special-status plant species. If the agricultural fields are left fallow, suitable habitat for a number of sensitive plant species may develop. Therefore, additional focused plant surveys will be required on a project-by-project basis as specific developments are proposed and subsequent or supplemental CEQA documentation is prepared.

The potential habitat for these species is confined to RSS and sandy-rocky soils, which are confined to the proposed open space area in the southwestern portion of the Specific Plan area.

California Species of Concern. Twenty-one California Wildlife Species of Concern were analyzed for their potential to occur in the WLC site and off-site facilities:

- Orange-throated whiptail (*Aspidoscelis hyperythra*)
- Coast horned lizard (*Phrynosoma coronatum*)
- Northern red-diamond rattlesnake (*Crotalus ruber ruber*)
- Western spadefoot (*Spea hammondii*)

- Tricolored blackbird (*Agelaius tricolor*)
- Bell's sage sparrow (*Amphispiza belli belli*)
- Ferruginous hawk (*Buteo regalis*)
- Merlin (*Falco columbarius*)
- Yellow-breasted chat (*Icteria virens*)
- White-faced ibis (*Plegadis chihi*)
- Western yellow bat (*Lasiurus xanthinus*)
- Southern grasshopper mouse (*Onychomys torridus ramona*)
- American badger (*Taxidea taxus*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Burrowing owl (*Athene cunicularia hypugaea*)
- California horned lark (*Eremophila alpestris actia*)
- Prairie falcon (*Falco mexicanus*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)

The WLC site contains suitable foraging habitat for loggerhead shrike, ferruginous hawk, merlin, prairie falcon, California horned lark, and burrowing owl but no suitable nesting habitat for ferruginous hawk, merlin, or prairie falcon. Suitable ground-nesting habitat occurs for burrowing owl and California horned lark. No sign of burrowing owl was identified during focused surveys conducted in 2012. However, burrowing owl was identified within the southern portion of in the WLC project site and offsite facilities during focused surveys conducted in 2013 and in 2018, and, it was determined that this species may range through the general area. Several California horned larks and loggerhead shrikes were observed foraging within the area. No suitable habitat for western spadefoot, Bell's sage sparrow, yellow-breasted chat, white-faced ibis, western yellow bat, southern grasshopper mouse, and American badger occurs within the WLC site due to historic agricultural activities, regular disking of the site, and dominance of sparse, non-native low-quality vegetation. The western yellow bat, southern grasshopper mouse and American badger are not covered under the MSHCP. However, since there is no suitable habitat for these species, no impact is expected to occur. The remaining species are covered under the MSHCP.

There is limited suitable habitat for orange-throated whiptail, northern red-diamond rattlesnake, coast horned lizard, southern rufous-crowned sparrow, northwestern San Diego pocket mouse, San Diego jackrabbit, and Los Angeles pocket mouse in the WLC site. These species are generally associated with RSS, which is limited to the north near SR-60 and Gilman Springs Road and in the proposed Open Space Area adjacent to the LPSRA between World Logistics Center Parkway and Redlands Boulevard, just south of Brodiaea Avenue. Focused surveys for Los Angeles pocket mouse in 2005, 2010, 2012, and 2013 were negative. The orange-throated whiptail is not covered under the MSHCP. There is limited habitat for the orange-throated whiptail in an area that is currently proposed for open space in the southwestern corner of the Specific Plan area. The other species mentioned are covered under the MSHCP. There is a low potential for these species to occur.

No additional California wildlife species of concern were analyzed for potential to occur in the WLC site because none is known to occur on, or in the vicinity of, the site. No suitable habitat was found in the WLC site to support other California Wildlife Species of Concern. Therefore, except for the burrowing

owl, loggerhead shrike, and California horned lark, California Wildlife Species of Concern are not likely to occur in the WLC site and off-site facilities.

California Native Plant Society (CNPS). The CNPS is a non-profit organization whose collaborative efforts in research helps maintain an inventory of rare and endangered plants that occur throughout California. The CNPS has developed its own classification system in defining the degree of endangerment for sensitive plant species that models that of the FESA and CESA. Plants considered to be rare, threatened, or endangered in California are designated as CRPR 1B or List 2B plant species. Plants for which more information is needed to determine their status are designated CRPR 3 species. Plants with limited distribution are designated as CRPR 4 species.

CNPS Ranked Plant Species. Eight CNPS CRPR 1B plant species were analyzed for potential to occur in the WLC site: San Jacinto Valley crownscale, thread-leaved brodiaea, Plummer's mariposa lily, smooth tarplant (*Centromadia pungens* ssp. *laevis*), slender-horned spineflower, Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Robinson's peppergrass, and San Bernardino aster.

Two CNPS CRPR 2B plant species, mud nama (*Nama stenocarpum*) and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), were analyzed for potential to occur in the WLC site.

One CNPS CRPR 3 plant species, Parry's spineflower (*Chorizanthe parryi* var. *parryi*), was also analyzed for potential to occur in the WLC site.

No evidence of any CNPS CRPR 1B, List 2B, or List 3 plant species were observed in the WLC site. In addition, no suitable habitat for any of these species occurs due to historic agricultural activities, regular disking of the site, and dominance of sparse, low quality non-native vegetation.

No additional CNPS CRPR plant species were analyzed for potential to occur in the WLC site and off-site facilities because none is known to occur on, or in the vicinity of, the site. No suitable habitat was found in the WLC site to support other CNPS CRPR plant species. Therefore, CNPS CRPR plant species are not likely to occur in the WLC site.

Migratory Bird Treaty Act and Section 3503 of the State Fish and Game Code. The WLC site contains suitable nesting habitat for ground-nesting birds such as burrowing owl and horned lark. The few large trees on the site provide suitable habitat for other migratory birds.

Raptor Foraging Habitat. The WLC site contains flat, open areas with sparse vegetation, which provides marginal foraging habitat for some raptors species. Due to the regular, heavy disturbance associated with the various agricultural activities in the area, and the limited size of the site in relation to the expansive foraging habitat in the vicinity including the SJWA, LPSRA, and the Badlands to the east, the foraging habitat on site is considered marginally suitable and of poor quality (MBA 2013, pages 94-95).

4.4.1.11 MSHCP Consistency Analysis

a. Burrowing Owl

The burrowing owl is an avian species of special concern that is protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503. This species typically occurs in grassland and scrub habitats characterized by low-growing vegetation with an abundance of small mammal burrows, including the California ground squirrel. It often prefers areas with moderate disturbance and/or berms or drainage features. Reasons for burrowing owl population decline include habitat destruction, insecticide poisoning, rodenticide (particularly squirrel eradication), and shooting.

The WLC site contains potentially suitable habitat for burrowing owl, such as flat, open, valley floor plains occupied by non-native grasslands, fallow fields, and agricultural lands. Details of the methodologies for the focused surveys are discussed in Appendix D, Burrowing Owl Focused Surveys.

Details for these focused surveys for burrowing owl may not match exactly with the WLC site as the boundaries of the various studies have evolved over time. The 2012 studies for burrowing owl encompassed 3,300 acres.

Burrowing owl was identified within the southern portion of the WLC site during focused surveys conducted in 2013 by MBA and in 2018 by ESA, and the species may continue to range through the general area. Focused surveys for burrowing owl conducted in June–July 2012 did not locate any owls (MBA 2012b). However, burrowing owl was observed on the WLC site in 2018. During focused surveys conducted by MBA in 2005 (covering approximately 1,778 acres of the WLC site), a single breeding pair of burrowing owls was observed within an ephemeral drainage feature (Drainage 4) that longitudinally traverses the western portion of the survey area. The owls were observed perching and in flight along the western bank of the drainage feature, immediately south of its intersection with Dracaea Avenue. Conditions in this area have changed over the 6-year period and there was no longer suitable habitat due to changes in land use.

In addition, focused burrow and burrowing owl surveys conducted by MBA in 2006 (750 acres), 2007 (2,904 acres), 2010 (3,714 acres), and 2012 (3,300 acres) did not determine the presence of any burrowing owls. (Appendix D, Burrowing Owl Focused Surveys). Burrowing owls were recorded in 2008 (246 acres) just south of the Skecher's Logistic Center (Fierro, personal communication). A single burrowing owl was observed within the temporary detention basin located south of the Skecher's building during the March 2012 site visit. Burrowing owl was observed in the southeastern portion of the WLC site in 2018, just north of the SJWA.

The disked and fallow fields within the WLC site continue to provide suitable foraging habitat for burrowing owl. The area contains numerous California ground squirrel and desert cottontail burrows, which are potentially suitable for burrowing and nesting by the owls. Therefore, this species appears to be present within portions of the WLC site and the SJWA to the south, although it may not be a permanent resident.

b. Los Angeles Pocket Mouse

Los Angeles pocket mouse (LAPM) is a California species of special concern that inhabits lower elevation grasslands and scrub communities within Los Angeles, San Bernardino, and Riverside Counties. Los Angeles pocket mouse is the smallest of the pocket mice subspecies and is adapted for arid or semi-arid environments and nocturnal activity. The primary habitat requirement for the subspecies is a suitable burrowing substrate of fine sandy soils. LAPM is commonly found in low elevation open grasslands, coastal sage scrub, and alluvial fan sage scrub. The subspecies is recorded to have been observed approximately 2 miles southeast of the study area (CDFW 2012).

The majority of the WLC site does not contain suitable habitat for LAPM due to regular disturbance associated with agriculture, and the absence of fine sand soils. Drainage Feature 9, however, is not subject to regular agricultural disturbance and contains Riversidean sage scrub appropriate soils; therefore, this drainage feature contains marginally suitable habitat for LAPM.

MBA conducted surveys for LAPM in 2005, 2010, 2012, and 2013. ESA conducted LAPM surveys in 2018. In 2005, MBA conducted focused trapping surveys for LAPM in the south-central and southeastern portions of the WLC site. A total of 121 traps were set throughout the drainage features. In 2010, MBA conducted focused trapping surveys in the same location as in 2005 and in two additional drainage features. A total of 122 traps were set among the three drainage features in 2010. Only Drainage Feature 9 has suitable RSS and soils, and the other two drainage features only contained suitable soils. The 2012 trapping effort was conducted in the same area as in 2010. No LAPM were trapped. No LAPM were trapped during the focused surveys in any of the MBA trapping sessions (2005, 2010, 2012, and 2013); therefore, it was determined that this species is absent from the WLC site and no additional trapping were required. However, ESA conducted trapping in 2018 but found no LAPM.

c. Criteria Area Species

The following ten Criteria Area Species were assessed for their potential to occur in the WLC site:

- Mud nama (*Nama stenocarpum*);
- Little mousetail (*Myosurus minimus* ssp. *apus*);
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*);
- Thread-leafed brodiaea (*Brodiaea filifolia*);
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*);
- Parish's brittlescale (*Atriplex parishii*);
- San Jacinto valley crownscale (*Atriplex coronata* var. *notatior*);
- Round-leafed filaree (*California macrophyllum*);
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*) and
- Nevin's Barberry (*Berberis nevinii*).

The thread-leafed brodiaea typically occurs on gentle hillsides, valleys, and floodplains in semi-alkaline mudflats; therefore, it is not likely to occur within the WLC site.

Most of these species are associated with in highly alkaline, silty-clay soils in association with the Traver-Domino-Willows soil association. In Riverside County, vernal pool plant species are most closely associated with the Willows soil series.

According to the biological assessment, San Jacinto valley crownscale, Parish's brittlescale, Davidson's saltscale, smooth tarplant, Coulter's goldfields, and little mousetail are not likely to occur on the project site due to the absence of vernal pools or vernal pool-like conditions, or alkaline conditions (e.g., alkali annual grassland components of alkali vernal plains or areas that have semi-regular inundation).

The WLC site does not contain friable clay soils, so round-leafed filaree is not expected to occur. Although small areas of the site contain sage scrub and chaparral vegetation, no alluvial scrub or rocky chaparral slopes occur; therefore, Nevin's barberry is not likely to occur on the project site.

Mud nama is associated with ponds, lakes, or regularly muddy embankments. Since these conditions are not present, it is unlikely this species occurs on the WLC site.

d. Narrow Endemic Plant Species

The following six Narrow Endemic Plant Species were assessed for their potential to occur on the WLC site:

- San Diego ambrosia (*Ambrosia pumila*);
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*);
- California Orcutt grass (*Orcuttia californica*);
- spreading navarretia (*Navarretia fossalis*);
- many-stemmed dudleya (*Dudleya multicaulis*); and
- Munz's onion (*Allium munzii*).

As with the Criteria Area species, San Diego ambrosia, Wright's trichocoronis, California Orcutt grass, and spreading navarretia are not likely to occur on the WLC site due to the absence of vernal pools, vernal pool-like conditions, or alkaline conditions (e.g., alkali annual grassland components of alkali vernal plains or areas that have semi-regular inundation). In addition, no clay soils occur within the WLC site; therefore, many-stemmed dudleya and Munz's onion are not likely to occur. Rare plant surveys conducted by ESA in 2018 did not result in observations of any Criteria Area nor Narrow Endemic Plant Species.

e. Riparian/Riverine Habitat and Vernal Pools

The WLC site contains two types of riparian vegetation: mule fat scrub and southern willow scrub. Both plant communities are isolated, disturbed, low in vegetative cover, and generally of poor habitat quality. Three drainage features and one catch basin contain riparian/riverine areas (see previously referenced Figure 4.4.2). One of these drainage features is outside of the WLC site on the east side of Gilman Springs Road, within one of the proposed debris basins.

The mule fat scrub community on site occurs intermittently within Drainage Feature 9; a small patch within Drainage Feature 7; and within the debris basin associated with Drainage Feature 8. Drainage Feature 9 and the catch basin are both narrow and bordered on each side by disked agricultural fields. Drainage Feature 9 also contains a narrow band of mule fat scrub, but is bordered by relatively undisturbed Riversidean sage scrub. Over time, the drainage feature has fragmented and currently contains isolated patches of riparian vegetation. Within the mule fat scrub community, tree tobacco and other non-native plant species, have established in approximately equal quantity as mule fat.

Drainage Feature 8 has a proposed debris basin across Gilman Springs Road. This small drainage has an area of mule fat scrub that is probably surviving based on the blockage of the drainage at the road. The mule fat scrub portions of the WLC site are poor in habitat quality due to the small size of the stands, the sparse vegetative cover within the communities, the isolation of the individual stands, and the disturbance from the adjacent agricultural uses. Given the above characteristics, riparian wildlife species have a low potential to occur. Despite the absence of suitable habitat for federally and State listed threatened or endangered species such as least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo that commonly occur in riparian habitat, this drainage feature is considered riparian/riverine areas under the MSHCP because of the presence of mule fat and the subsurface connectivity to off-site riparian areas downstream.

Southern willow scrub occurs in a single isolated catch basin in the WLC site (Figure 4.4.2, Drainage Feature 14). The catch basin contains marginal vegetative characteristics and no hydrological characteristics that fit the MSHCP description for riverine/riparian areas. It exists as isolated, human-made, catch basin that receives nuisance flows and agricultural runoff from concrete cattle containment areas adjacent to the basin, which have subsequently been removed. It is located south of Alessandro Road and does not contain any upstream or downstream connection to any other drainage features. There is no evidence of prolonged ponding within this basin. Due to the high percolation rate, this area does not hold water long enough to provide the necessary hydrology associated with the creation and maintenance of a vernal pool. There are no drainage features that convey natural flows into these basins. Therefore, the basins only source of hydrology is from natural rainfall within the limits of the basin. Vegetation in the catch basin consists of southern willow scrub and includes plant species such as Freemont's cottonwood, black willow, sandbar willow, and mule fat. The plant community primarily consists of a moderate density of trees with a few understory plants.

Southern willow scrub is typically considered suitable habitat for a number of wildlife species that commonly occur in riverine/riparian habitats throughout southern California. These wildlife species include sensitive avian species such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. The southern willow scrub associated with Drainage 14 does not contain hydric soils or wetland hydrology indicators. This basin is considered low in habitat quality because it is isolated, small in size, and lacks significant vegetation density. The vegetation within the basin is sparse, with a 30- to 40- percent canopy cover of native willows. The small patch of riparian habitat

also contains about 50 percent native willows and 50 percent non-native ornamental trees such as Peruvian pepper tree (*Schinus molle*). The southern willow scrub habitat is 0.86 acre in size (rounded up to 1 acre in the document). There is no suitable habitat for any riparian/riverine avian species, such as least Bell's vireo (*Vireo bellii pusillus),* southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), due to the limited size of the basin. There is also no suitable habitat within the immediate vicinity (approximately 2 miles) and there is no direct habitat connection to any suitable offsite habitat. Based on these factors, there is no suitable nesting habitat and limited resting habitat for the listed riparian species covered under the MSHCP. Given these characteristics, riparian wildlife species have a low potential to occur.

The term "functioning riparian habitat" describes a patch or area of riparian habitat that functions as a riparian habitat. It provides suitable habitat for plant and wildlife species that are commonly found in riparian habitats. Even low-quality riparian habitat may provide functional riparian habitat if it supports a population of riparian species. The riparian habitat onsite is extremely small and completely isolated from riparian habitat in the eastern portion of the City of Moreno Valley.

The riparian vegetation onsite does not support wildlife species commonly found within riparian habitat such as common yellow-throat (*Geothlypis trichas sinuosa*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), and summer tanager (*Piranga rubra*), as described in the Birds as Indicators of Riparian Vegetation (no date) condition in the western U.S. Bureau of Land Management, Partners in Flight, Boise, Idaho. Therefore, even though the WLC site contains small patches of riparian vegetation, it does not function as a riparian habitat for common riparian bird species. A few plants in an isolated area do not create a functional habitat.

MBA also conducted a vernal pool habitat assessment within the WLC site and off-site facilities. As defined by the MSHCP, vernal pools are "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season." No vernal pools or ephemeral ponds were observed in the WLC site or any of the off-site areas during the habitat assessment survey. In addition, no suitable habitat for any fairy shrimp species was identified within any of the WLC site.

f. Urban/Wildlands Interface Analysis

This section addresses the indirect effects associated with locating development in proximity to MSHCP Conservation Areas. The WLC site is bordered to the east by Proposed Core 3 (MSHCP Section 6.1.1) and to the south by the SJWA and Existing Core H. Moreover, portions of the WLC site fall within the boundaries of these Conservation Areas.

The portion of the study area within the SJWA was previously used for agricultural land, but is owned by the State of California and operated as part of the SJWA. No development will occur in this area. The remaining portions of the WLC site that are within or adjacent to conservation areas will incorporate the design features and measures related to drainage features, toxics, lighting, noise, invasive plants, barriers, and grading/land development discussed below. These measures will make the project consistent with the MSHCP, Section 6.1.4, Guidelines Pertaining to the Urban/Wildlands Interface. A detailed description of recommendations pertaining to an urban/wildlands interface is provided below for adjacency issues identified in the MSHCP. Additional discussion of indirect impacts of the project on the SJWA and Conservation Areas is included in Section 4.4.1.12, *Other Issues*, later in this section. This information is from Section 6.1.4 of the MSHCP, *Guidelines Pertaining to the Urban/Wildland Interface.*

Drainage Features. Development of the WLC site will include a comprehensive system of storm drains to handle runoff from the project. The project drainage plan shows that drainage from the WLC site will be directed to the regional storm drain system and away from the adjacent open space, or treated by water quality and retention basins to maintain historical runoff rates and patterns onto downstream land, such as the Mystic Lake area.

The conceptual drainage plan for the WLC site development consists of a series of collection basins throughout the development that will treat the first flush storm events and convey storm flows to a series of detention basins along the southern boundary of the WLC site. The basins will be designed to provide a water quality treatment as well as provide an area for creation of riparian habitat. Based on the size of the proposed detention basins, only the inlet and outlet structures will require routine maintenance. This allows the majority of the detention basins to remain undisturbed, which allows for long-term conservation of the riparian habitat. The design, operation, and maintenance of the drainage system for the project will be designed to regulate the discharge of water into any MSHCP Conservation Area under either of these design scenarios. No water quality impact to downstream properties will result with implementation of the project.

Proposed Developments in proximity to the MSHCP Conservation Area will be required to incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures will be required to be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems will be required to be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

Barriers. The WLC project will incorporate special edge treatments designed to separate development areas from MSHCP open space areas both to the south and across Gilman Springs Road (i.e., fencing). The Specific Plan requires that native landscaping and fencing be installed to minimize unauthorized public access to the south and across Gilman Springs Road, which will also help minimize impacts related to domestic animal predation and illegal trespass and dumping. Impacts to adjacent native areas across Gilman Springs Road will therefore be minimized. In addition, the landscaping palette for the Specific Plan uses native species and precludes invasive plants as shown in the MSHCP invasive species list (MSHCP Table 6-2). The Specific Plan shows a 250-foot setback along the SJWA boundary to the south, as well as walls/fencing and controls on lighting that will comply with the City's new Municipal Code section 9.08.100 to preclude light spillage off site greater than 0.25 foot-candles per square meter. Warehousing will have a minimum 11-foot solid wall along the SJWA boundary with landscaping to soften the appearance and which may eventually provide roosting or nesting opportunities for native birds. There will be no public pedestrian or vehicular access from the development onto the SJWA land to the south, and private access to MSHCP areas to the east across Gilman Springs Road will be limited by fencing along private property lines within the project site.

Access. The project will prohibit public access into all MSHCP conservation areas including those contained within SJWA and Existing Core H to the south of the WLC site. Private access to Proposed Core 3 (Section 6.1.1, Proposed Core 3) in the eastern portion of the WLC site will be limited by fencing of private property limits, but the public may still be able to access these areas from public roads, including Gilman Springs Road.

Grading/Land Development. Project grading will not encroach into conservation land that will be designated as open space located within Existing Core H to the south or Proposed Core 3 (Section 6.1.1, *Proposed Core 3*) to the east of the WLC site.

Fuels Management. Fuels management focuses on hazard reduction for humans and their property (MSHCP, p. 6-72). According to the Fuels Management Guidelines, for new development planned adjacent to all MSHCP conservation areas or other undeveloped areas, brush management shall be incorporated in the development boundaries and shall not encroach into the MSHCP conservation areas (MSHCP, p. 6-72). Any areas planted with fire-resistant, non-invasive plants must not encroach into the MSHCP conservation area. Accordingly, with implementation of these measures, the WLC SITE project will be consistent with the MSHCP Fuels Management Guidelines.

g. Migratory Corridors/Linkages

The WLC site is adjacent to an existing migratory corridor across Gilman Springs Road (i.e., Criteria Cells 1290, 1389, and 1390) as designated by the MSHCP. While the open agricultural fields that presently occupy much of the WLC site are not designated as corridors or linkages in the MSHCP, the WLC site, and the SJWA, supports extensive agricultural fields, which do not constitute native vegetation, but do provide some foraging value and may allow for migration or movement of wildlife through the general area even considering the level of repeated disturbance by agricultural activities. Wildlife movement through this area is generally planned to take place across the Mystic Lake property to the south. The northern (upland) portion of the SJWA and the southern portion of the Specific Plan area do not provide suitable habitat or resources to support wildlife migration or regular wildlife movement.

4.4.1.12 MSHCP Conservation Criteria Areas

Figure 4.4.4 shows the location and relationship of the MSHCP conservation areas described in this section, as well as their relationship to the WLC site.

a. Core 3

The MSHCP establishes a number of “core” areas that contain or support important biological habitat or species. Some of the core areas are existing reserves, while others are proposed for preservation. This section analyzes the project in relation to the nearby MSHCP core areas. The WLC site is located within the Reche Canyon/Badlands Area Plan and falls within both the Badlands North Area Plan Subunit and the SJWA/Mystic Lake Area Plan Subunit. No existing or proposed linkage, or constrained linkage areas are in the vicinity of the project. Proposed Core 3 (MSHCP Section 6.1.1) is located to the north and east of the WLC site and Existing Core H is located to the south (see previously referenced Figure 4.4.4). As shown in Table 4.4-4, portions of the WLC site fall within 3 Criteria Cells associated with existing or proposed core areas. No development will take place within any of the three Criteria Cells nor will there be any development within the 74.3-acre Open Space area in the southwestern corner of the WLC site.

Table 4.4-4: MSHCP Criteria Cells within the WLC Site Study Area

Area Plan Subunit within MSHCP	Cell Group	Criteria Cells
Badlands North Area Plan Subunit 3	Cell Group E	1390
	Cell Group X	1297
		1204
San Jacinto Wildlife Area/Mystic Lake Area Plan Subunit 4	Cell Group D	1364
		1370
		1377
		1386
		1389
		1482
		1483
		1477
		1577

No portions of the WLC site occur within Cell Group D, which is within the SJWA/Mystic Lake Area Plan Subunit 4. This Cell Group supports Existing Core H. Approximately 929 acres of the SJWA site are within Cell Group D. This area is owned by the State of California through a purchase in 2001 and is designated as Public/Quasi-Public Conserved Land under the MSHCP (see Figure 4.4.4). This land consists of more than 900 acres of non-native grassland.

Minimizing edge effects is considered a significant goal of Proposed Core 3. The portions of the Core along Gilman Springs Road are currently subject to edge effects associated with existing traffic, and the development of the project may incrementally increase these edge effects. All development in the southern portion of the project will need to implement measures that minimize edge effects associated with urban development in wildlands. The minimization efforts are addressed in Section 4.4.1.8g, *Urban/Wildlands Interface Analysis*, of this report.

The SJWA land is located adjacent to the junction of Proposed Core 3 and Existing Core H. Development of the WLC project will not impede the movement of wildlife or reduce the continuous area of the two cores, which are both goals of Proposed Core 3. Additionally, the portion of the WLC site located adjacent to the Core 3/Core H junction will remain undeveloped, facilitating connectivity between the two Cores.

The WLC site occupies less than 0.1 percent of Proposed Core 3 and the goals of the Proposed Core 3 will be maintained.

b. Existing Core H

Existing Core H consists of the Lake Perris State Recreation Area (LPSRA), SJWA, private lands, and lands with pre-existing conservation agreements (see Figure 4.4.4). It provides resident habitat for several species, contains soils suitable for some Narrow Endemic plant species, supports vernal pool complexes and may provide a connection to Core Areas in the Badlands and the middle reach of the San Jacinto River. Maintenance of habitat quality, floodplain processes along the San Jacinto River, and conservation of vernal pool complexes are important for species covered by the MSHCP. The Core Area provides potentially suitable live-in habitat for small rodents and common mammals.

The SJWA in Existing Core H contains potentially suitable habitat for small rodents, common mammals, and burrowing owl. No vernal pool complexes or floodplain conditions occur on the project site and there is no suitable habitat for any narrow endemic plant species. The WLC site is not located within Existing Core H and the goals of this core area will be maintained.

c. Reche Canyon/Badlands Area Plan

The Reche Canyon/Badlands Area Plan of the MSHCP is in the northern portion of western Riverside County, south of the City of San Bernardino, west of The Pass Area Plan and the San Jacinto Valley Area Plan, north of the Mead Valley Area Plan and the Lakeview/Nuevo Area Plan, and east of the Highgrove Area Plan, the Cities of Norco and Riverside Area Plan, and the March Area Plan. The City of Moreno Valley sits entirely within the Reche Canyon/Badlands Area Plan. The Area Plan incorporates lands within the LPSRA and SJWA, and is separated into 4 Area Plan Subunits. The WLC site is located within portions of Area Plan Subunit 3: Badlands North and Area Plan Subunit 4: San Jacinto Wildlife Area/Mystic Lake (see Figure 4.4.4).

The target conservation acreage range for the Reche Canyon/Badlands Area Plan is 30,815 to 35,905 acres; it is composed of approximately 20,295 acres of existing Public/Quasi-Public Lands and 10,520 to 15,610 acres of Additional Reserve Lands. The target acreage range within the City of Moreno Valley is 80 to 130 acres. The City of Moreno Valley target acreage is included within the 10,520 to 15,610-acre target conservation range on Additional Reserve Lands for the entire Area Plan.

The SJWA immediately south of the WLC site, is designated as Additional Reserve Land. All of this area is within the City of Moreno Valley, and will not be impacted by the WLC project, which would fulfill the MSHCP's target acreage range for the City.

d. Area Plan Subunit 3: Badlands, North

Area Plan Subunit 3 of the Reche Canyon/Badlands Area Plan includes lands within the northeastern and eastern portions of the Area Plan within the Badlands (see Figure 4.4.4). Area Plan Subunit 3 contains a total of 88 Criteria Cells organized into 16 Cell Groups and 4 independent cells. The MSHCP

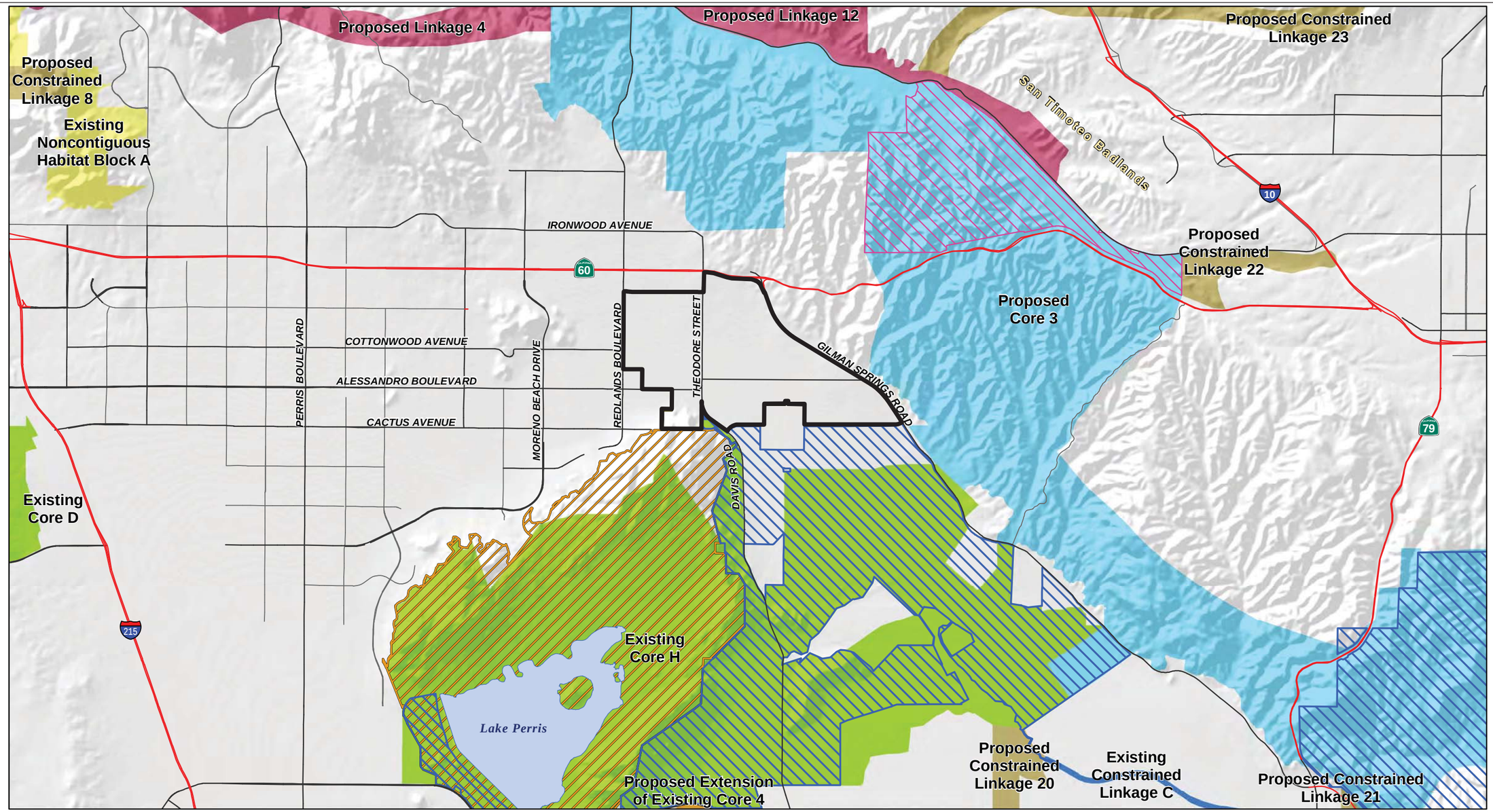
conservation objectives for Area Plan Subunit 3 include conserving land within the Badlands area, north to the vicinity of SR-60, south to southeastern extent of the SJWA, west to the eastern boundary of the SJWA, and east to the Laborde Canyon vicinity. Target acreage range required for Additional Reserve Lands within Area Plan Subunit 3 is 8,270 to 10,895 acres. Plant and Wildlife Planning Species within Area Plan Subunit 3 include:

- Nevin's barberry;
- Bell's sage sparrow;
- Cactus wren;
- Loggerhead shrike;
- Southern California rufous-crowned sparrow;
- Los Angeles pocket mouse;
- San Bernardino kangaroo rat;
- Stephens' kangaroo rat;
- Bobcat; and
- Mountain lion.

Under the MSHCP, additional biological issues and considerations are proposed for conservation for each Area Plan Subunit. The biological issues and considerations emphasized in Area Plan Subunit 3 include:

- Conserving large habitat blocks in the Badlands.
- Maintain Core Area for bobcat.
- Maintaining Core and Linkage Areas for mountain lion.
- Determining potential for populations of San Bernardino kangaroo rat along San Timoteo Creek.
- Maintain Linkage Area to SJWA for Stephens' kangaroo rat.
- Determine presence of potential Core Area for Los Angeles pocket mouse in San Timoteo Creek and tributaries to the Badlands.
- Maintain Core Area for Nevin's barberry.

The eastern boundary of the WLC site (i.e., Gilman Springs Road) is within Area Plan Subunit 3, the main focus of which is protection of bobcat and mountain lion habitat. The portions of the WLC site within Area Plan Subunit 3 are along the southwestern edge of the Subunit and collectively comprise approximately one percent of the target acreage range proposed for conservation. Since the WLC site encroaches on a limited portion of the boundary of the Area Plan Subunit, and since these portions of the WLC site are already subject to existing edge effects, impacts from development under the WLC site does not conflict with the long-term conservation goals for bobcat or mountain lion habitat. It should be noted that the WLC site is across a major roadway (Gilman Springs Road) from the Badlands and the sensitive habitat contained in this Area Plan Subunit.



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SOURCE: County of Riverside, 2003 & 2011; California Dept. of Fish and Game, 2011

World Logistics Center Project

Figure 4.4-4
MSHCP Conservation Areas

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e. Cell Group E and Criteria Cell 1390

Conservation within Cell Group E will contribute to assembly of Proposed Core 3 and will focus on chaparral, coastal sage scrub, grassland, and Riversidean alluvial fan sage scrub habitat. Areas conserved within this Cell Group will be connected to habitat proposed for conservation in Cell Group X to the north, habitat proposed for conservation in Cell Group C also to the north, and to habitat proposed for conservation in Cell Group F to the south. Conservation within Cell Group E will range from 45 percent to 55 percent of the Cell Group focusing in the western portion (see Figure 4.4.4).

f. Cell Group X: Criteria Cells 1204 and 1297

Conservation within Cell Group X will contribute to assembly of Proposed Core 3 and will focus on chaparral, coastal sage scrub, and grassland habitat. Areas conserved within Cell Group X will be connected to habitat proposed for conservation in Cell Groups C to the east, V to the northeast, and to chaparral and grassland habitat proposed for conservation in Cell Group E to the south. Conservation within Cell Group X will range from 65 percent to 75 percent of the Cell Group focusing in the northeastern portion of the Cell Group (see Figure 4.4.4).

Within the southwestern portion of Cell Group X, and specifically within Criteria Cells 1204 and 1297, the WLC site encroaches on 114.2 acres. Under the MSHCP, conservation for Cell Group X is proposed for the northeastern portions of the Cell Group. The WLC site is not within the targeted conservation areas and, therefore, will not adversely affect the County's ability to achieve the goals of the MSHCP (see Figure 4.4.4). In addition, no development is proposed within Criteria Cells 1204 and 1297.

g. Area Plan Subunit 4: San Jacinto Wildlife Area/Mystic Lake

Area Plan Subunit 4 of the Reche Canyon/Badlands Area Plan includes lands within the southeastern portions of the Area Plan within the SJWA. Area Plan Subunit 4 contains 26 Criteria Cells organized into 3 Cell Groups and 12 independent cells. The MSHCP conservation objectives for Area Plan Subunit 4 include conserving land within the SJWA and Mystic Lake (see Figure 4.4.4). The target acreage range required for Additional Reserve Lands within Area Plan Subunit 4 is 860 to 1,750 acres.

Plant and Wildlife Planning Species within Area Plan Subunit 4 include:

- California Orcutt grass
- Los Angeles pocket mouse
- Smooth tarplant
- Thread-leaved brodiaea
- Wright's trichocoronis
- Stephens' kangaroo rat
- Loggerhead shrike
- Northern harrier (*Circus cyaneus*)
- Peregrine falcon
- Tricolored blackbird
- White-tailed kite
- Coulter's goldfields
- San Jacinto Valley crownscale
- Spreading navarretia
- Vernal barley (*Hordeum intercedens*)
- American bittern (*Botaurus lentiginosus*)
- Burrowing owl
- Bobcat
- Mountain plover (*Charadrius montanus*)
- Osprey (*Pandion haliaetus*)
- Prairie falcon
- White-faced ibis

- Black-crowned night heron (*Nycticorax nycticorax*)
- California horned-lark
- Davidson's saltscale
- Double-crested cormorant (*Phalacrocorax auritus*)

The biological issues and considerations emphasized in Area Plan Subunit 4 include:

- Conservation of alkali playa and other habitat to augment existing conservation in the SJWA and Mystic Lake.
- Conservation of existing vernal pool complexes associated with the San Jacinto River floodplain in the SJWA and Mystic Lake area. Conservation should focus on vernal pool surface area and supporting watersheds.
- Provide for a connection of intact habitat between the SJWA and the adjacent Badlands to the north.
- Conservation of Willow-Domino-Travers soils supporting sensitive plants such as San Jacinto Valley crownscale, Davidson saltscale, Coulter's goldfields, spreading navarretia, vernal barley and Wright's trichocoronis.
- Provide for and maintain a continuous linkage along the San Jacinto River from the southern to the southeastern boundary of the Reche Canyon/Badlands Area Plan.
- Maintain Linkage Area for bobcat.
- Maintain a Linkage Area for Stephens' kangaroo rat to SJWA.
- Determine the potential presence of potential Core Area for Los Angeles pocket mouse in connection between the Badlands and the SJWA.

The SJWA south of the WLC site includes grasslands and agricultural lands. The WLC site is not within or along the San Jacinto River floodplain, and does not contain any alkali playa habitat or vernal pool complexes under the definition provided by the MSHCP.

There is no Willow-Domino-Travers soil within the WLC site; therefore, San Jacinto Valley crownscale, Davidson saltscale, Coulter's goldfields, spreading navarretia, vernal barley and/or Wright's trichocoronis are not likely to occur in the WLC site.

The WLC site is located immediately north of the Stephens' kangaroo rat preserve within the SJWA. Only a small portion of the northern portion of the SJWA (about 135 acres along the northern boundary) has been subject to regular disking and other disturbances associated with agricultural uses, while the remainder has converted to non-native grassland. The regular disturbances have resulted in an absence of suitable habitat for Stephens' kangaroo rat within the northern portion of the SJWA. The presence of a habitat linkage for this species within the WLC site is unlikely and population fragmentation is not anticipated.

Small portions of the WLC site contain suitable habitat for Los Angeles pocket mouse and burrowing owl; however, focused surveys by MBA and ESA concluded that the WLC site does not support the Los Angeles pocket mouse. The population of burrowing owl on site fluctuates from year to year, but they have been observed on site in the past and in the recent 2018 survey, and extended periods of time.

h. Cell Group D: Criteria Cells 1364, 1370, 1377, 1386, 1389, 1477, 1482, 1483, and 1577

Conservation within Cell Group D will contribute to assembly of areas proposed for conservation for Existing Core H (see Figures 4.4.4 and 4.4.3). Conservation within Cell Group D will focus on agricultural land. Conservation within this Cell Group will be approximately five percent of Cell Group

D focused on the southern and western portion of the Cell Group. This cell group is already part of the SJWA and is being maintained for possible agricultural use.

Cell Group D, which includes Criteria Cells 1364, 1370, 1377, 1386, 1477, 1482, 1483 and 1577, is proposed for conservation under the MSHCP. All of the Criteria Cells are within the SJWA except for approximately 5 acres of the WLC site within Criteria Cell 1364 on which no development will be allowed.

4.4.1.13 Federal Migratory Bird Act and California Department of Fish and Wildlife Protection

a. Nesting Birds

The extensive agriculture plant communities in the WLC site provide suitable nesting habitat for ground-nesting avian species such as western meadowlark (*Sturnella neglecta*) and burrowing owl. Suitable habitat for shrub and tree nesting species such as red-tailed hawk, black phoebe (*Sayornis nigricans*), and house finch occur along the edges of existing development surrounding the WLC site as well as isolated, remnant patches of vegetation in undisturbed portions of the WLC site. Therefore, portions of the WLC site provide suitable nesting habitat for migratory birds protected under the MBTA and California Fish and Game Code.

b. Stephens' Kangaroo Rat

The WLC site is located just north of the Core Reserve Area for the Stephen's Kangaroo Rat Habitat Conservation Plan (HCP), but is not located within a core area. However, the entire study area is located within the fee area of the HCP. The project would have to comply with the HCP's Implementing Agreement (IA) and pay the County's per-acre mitigation fee.

c. USFWS Designated Critical Habitat

No USFWS designated Critical Habitat for any species is present within the WLC site.

d. Other Special Status Species

Based on the CDFW and CNPS database searches mentioned above, 26 special status species that are not listed as Threatened or Endangered have the potential to occur in the project vicinity (previously referenced Tables 4.4-2 and 4.4-3). Species that are not covered under the MSHCP or are not adequately conserved by the MSHCP at this time are also included in those tables.

4.4.1.14 Special-Status Species Not Covered by the MSHCP

The vast majority of special-status species considered in this analysis are "covered" species under the MSHCP. However, 18 special-status species have the potential to occur in the general project vicinity and are not covered under the MSHCP or are not adequately conserved by the MSHCP at this time. Details regarding the potential occurrence of these non-covered species are included in the General Biological Resources and MSHCP Compliance Report prepared by MBA and included as Appendix E-1. Due to unsuitable habitat and conditions within the project limits, none of these 18 non-covered species is expected to occur in the WLC site (see previously referenced Tables 4.4-2 and 4.4-3). Neither additional surveys nor additional conservation measures will be required for the project to address these species.

a. Special-Status Wildlife

The revised MBA report (2013) states that no special-status wildlife species were observed during field surveys. However, raptors are numerous in the agricultural fields on the WLC site and off site in the SJWA. None of the other special-status wildlife species was determined to be present within the WLC planning area because their habitat requirements are not present on the site; therefore, no further

survey or study is required to determine likely presence, absence, or to assess project-related effects to these species.

While none of the bat species identified in the MSHCP Compliance Report (Appendix E-1) is expected to roost in the WLC site, the site does contain suitable foraging habitat for bat species that may roost in the surrounding region. The incremental loss of bat foraging habitat on the site would be compensated by participation in the MSHCP because the MSHCP mitigation fees are meant to purchase conservation lands to support species throughout western Riverside County.

b. Raptors and Other Avian Species

California Fish and Game Code, Sections 3503, 3503.5, 3505, and 3513, and the California Code of Regulations (Title 14, Sections 251.1, 652 and 783-786.6) have specific provisions for the protection of raptors (birds of prey). Furthermore, the MBTA protects the nests of migratory birds and raptors. There are a limited number of tall trees within the project site that would provide roosting or nesting habitat for raptors, such as hawks and owls, among other resident and migratory bird species. Two raptor species, red-shouldered hawk and American kestrel, have been observed in the area on a regular basis, suggesting at least these raptors may be roosting on site or nearby. The extensive open land within the WLC site provides foraging habitat for raptors and other avian species.

Thirteen species have a low-to-moderate potential to occur on the site based on existing habitat quality. Burrowing owl is assumed to be present on site, especially in areas of suitable habitat and in agricultural fields that are left fallow for extended periods of time. Burrowing owl was observed on-site in 2018.

As previously indicated, the project site is within the MSHCP burrowing owl survey area, and habitat assessments and focused surveys were conducted. During the focused survey in 2005, one location within the WLC site contained burrowing owl sign (i.e., whitewash and bone fragments) and a pair was observed in this same area. Field surveys also identified suitable burrows in the WLC site that may provide habitat for the western burrowing owl. Therefore, the species is considered to be present due to the presence of suitable habitat on site.

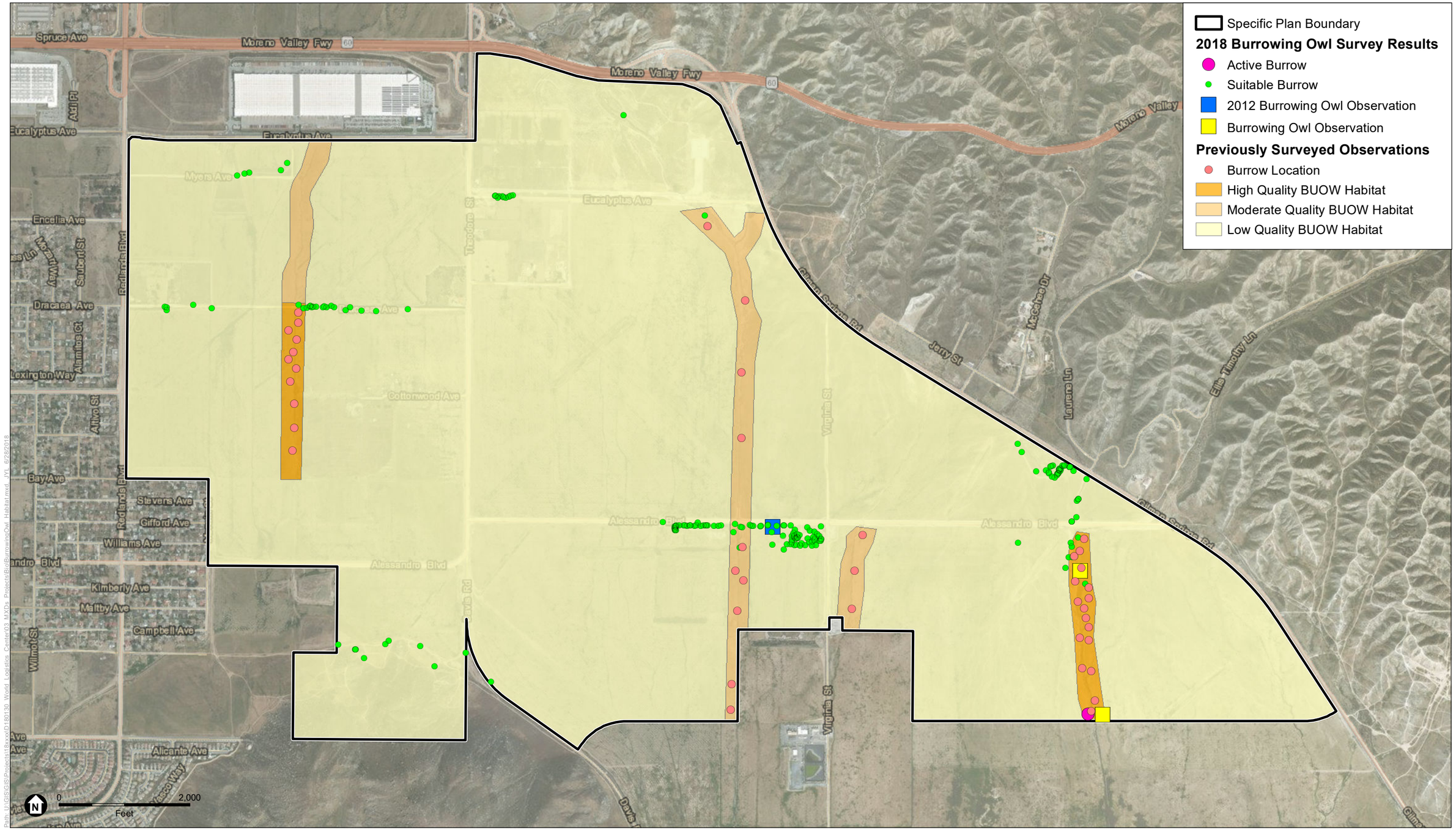
To confirm presence or absence of the burrowing owl in specific development areas of the WLC site, an MSHCP 30-day pre-construction protocol survey for burrowing owl will need to be conducted prior to any ground-disturbing activities. Figure 4.4.5 shows the location of burrowing owl habitat on the WLC site.

Of the species with potential to occur on the site, none is listed as threatened or endangered under State or Federal law, all are relatively widespread, and the WLC site does not contain high quality habitat for any of these species.

4.4.1.15 Other Issues

a. Setbacks

The MSHCP's urban/wildlands interface analysis encourages setbacks between proposed development areas and areas with sensitive biological resources. The WLC project has been designed to incorporate setbacks from sensitive biological resources pursuant to MSHCP requirements. The SJWA is considered an important resource due to the large number and diversity of birds that utilize it. Available research and MSHCP guidelines recommend a setback between the north boundary of the SJWA and the south boundary of development within the WLC project. Existing scientific and academic literature can provide guidance on the appropriate width of such a setback under these types of conditions.



SOURCE: ESRI 2016; Michael Brandman Associates 2010; ESA 2018

World Logistics Center

Figure 4.4-5
Burrowing Owl Habitat Suitability

ESA

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Typical setbacks to protect wildlife from human presence (though not warehousing) ranges from 50 to 500 feet, but 200–250 feet appears adequate for the most sensitive species.[1] In addition, the MSHCP and adopted guidelines of the USFWS and CDFW include a setback of 200 feet or more from nesting birds during construction activities. For example, typical burrowing owl mitigation says, "To adequately avoid active nests, no grading or heavy equipment activity shall take place within at least 250 feet of an active nest during the breeding season (February 1 through August 31) and 160 feet during the non-breeding season."

Note: The following information has been excerpted from the Jurisdictional Delineation Report prepared by MBA which was updated in 2014 to respond to comments from the resource agencies. ESA prepared an update in 2016. The reports are available for review at the City of Moreno Valley

4.4.1.16 On-site Drainages

A formal jurisdictional delineation (JD) was conducted within the WLC site and offsite facilities by MBA in September 2007 and again in March 2012. ESA conducted an updated JD in 2016 that corroborated the MBA JD. A total of 15 primary drainage features were identified during these combined surveys. A number of sub-drainages or tributaries were also identified. Jurisdiction for each drainage and/or sub-drainage or tributary was evaluated for jurisdiction under Section 404 and 401 of the CWA as administered by U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB), respectively; the Porter Cologne Act as administered by the RWQCB; and Section 1600 of the Fish and Game Code as administered by CDFW.

Based on comments received from the resource agencies, the 2013 JD report concludes that two drainage features (Drainage 12 and 15) have been determined to be jurisdictional waters of the U.S. under Section 404 and 401 of the Clean Water Act (CWA). Drainage 15 is included in this discussion because it may occur within two offsite utility improvements. Approximately 500 linear feet of the drainage feature was included in the survey area. Approximately 5,430 linear feet of Drainage 12 is included in the survey area (0.5 acres). This includes approximately 1,300 linear feet within the WLC site, and the remaining 4,130 linear feet will be part of the offsite improvements. The remaining 13 drainage features are considered isolated features with no direct connectivity to downstream traditional navigable waters or have no significant nexus. Drainage features 1, 5, and 6 are roadside ditches that are also isolated features. Drainage features 3, 4, 10, 11, and 13 are upland swales with evidence of periodic erosion but no evidence of annual flows and no clearly defined bed and bank feature. No jurisdictional wetlands were identified within the entire WLC site. However, the regulatory agencies make all final jurisdictional determinations.

Drainage features 3, 4, 10, 11, and 13 do not have a clearly defined bed and bank feature and do not have any riparian habitat or evidence of flows. These features are better described as upland swales with occasional eroded areas. Under the Porter Cologne Act, the RWQCB takes jurisdiction of drainage features that would normally be under USACE jurisdiction, but are considered isolated. Drainages 7, 8, 9, 12, and 15 were determined to be waters of the state and subject to the jurisdiction of both the CDFW and RWQCB. The jurisdictional limits of waters of the state are not required to have downstream connectivity. There are approximately 3.0 acres of waters of the state, which includes areas with a clearly defined bed and bank feature within the WLC site and offsite facilities. However, the CDFW makes all final Section 1600 jurisdictional determinations.

Drainage 1: This feature is a roadside ditch that conveys nuisance flows on the east side of Redlands Boulevard. Currently the ditch is contained within a concreted-lined swale and has intermittent areas with an earthen bed and bank. This ditch has no vegetation and leaves the site in an underground storm drain facility. This roadside ditch typically conveys flows during any storm event because most of the drainage is currently paved. This feature does not contribute to the function or value of any downstream drainage features and is not considered a riparian/riverine feature.

[1] *Setting Buffer Sizes for Wetlands.* J. McElfish 2008.

Drainage 2: This feature is an upland swale that conveys nuisance flows within an actively disked agricultural field and only receives flows every 5 to 7 years. This swale contains periodic sign of erosion, but is mostly an unvegetated swale with minimal evidence of flows. This drainage begins to sheet flow just north of Bay Avenue and has no hydrologic connection to any downstream drainage feature. This feature does not contribute to the function or value of any downstream drainage and is not considered a riparian/riverine feature.

Drainage 3: This feature is a temporary detention basin used to treat nuisance flow from the adjacent Skechers logistic facility. The flows within this feature are completely contained within the facility and there is no downstream connection to any other drainage features. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 4: The drainage feature previously originated from an underground storm drain beneath SR-60. The previous flows from this feature have been redirected into the detention basin associated with Drainage 3. Drainage 4 currently conveys flows from local runoff within the WLC site footprint and only receives flows every 5 to 7 years. This feature has evidence of a historic channel near the intersection of Dracaea Avenue and Sinclair Street. However, this feature sheet flows just south of Cottonwood Avenue and has no hydrologic connection to any downstream drainage features. This drainage does not contribute to the function or value of any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 5: This drainage is a roadside ditch located along the western side of World Logistics Center Parkway. This drainage originates at the eastbound World Logistics Center Parkway off-ramp from SR-60. This feature conveys nuisance flows from Theodore Street and immediate vicinity during large storm events and may only receive flows every 5 to 7 years. This feature contains an intermittent bed and bank feature, but terminates just north of Alessandro Boulevard. This feature has no hydrologic connection to any downstream drainage. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 6: This feature is also a roadside ditch located along the eastern side of World Logistics Center Parkway. This drainage originates from an underground storm drainage beneath SR- 60. It conveys nuisance flow from World Logistics Center Parkway and immediate vicinity and may only receive flows every 5 to 7 years. This feature contains an intermittent bed and bank feature, but terminates southeast of Alessandro Boulevard within an active agricultural field. This feature has no hydrologic connection to any downstream drainage. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 10: This drainage is an isolated feature that contains some evidence of erosion and is caused by a change in slope within highly erosive soils. This feature terminates as the topography levels resulting in sheet flows. This feature contains a few scattered tree tobacco, but otherwise has no change in soils or vegetation. This feature has no hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 11: This drainage is an isolated feature and similar to Drainage 10. This feature contains some evidence of erosion and is likely caused by runoff associated with Gilman Springs Road. This feature terminates as the topography levels resulting in sheet flows. This feature has no hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainage 13: This drainage is an isolated feature and similar to Drainage 10. This feature contains some evidence of erosion and is likely caused by runoff associated with the steep hillsides to the south. This feature terminates as the topography levels resulting in sheet flows. This feature has no hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature.

Drainages 1, 2, 3, 4, 5, 6, 10, 11, and 13 do not provide any function or value as drainage features and do not meet the minimum criteria to be designated as Riparian/Riverine areas. All of the above-mentioned drainage features, with the exception of Drainage 13, flow in a north-to-south direction and in a straight-line channel. Drainage 13 flows in a south-to-north orientation. All of these channels terminate as sheet-flow within the WLC site or immediately offsite and do not reappear further downstream. These features have a parallel flow pattern and are artificially created to minimize flooding impacts to the surrounding agricultural lands within the WLC site. None of these features has any downstream hydrologic connectivity to any downstream drainage features.

Project components affecting streambed and bank subject to CDFW jurisdiction, including riparian habitat, would require a Streambed Alteration Agreement (SAA) from CDFW.

When impacts are identified during project-specific applications, the proponent will apply for appropriate permits. Mitigation ratios will be determined following standard guidelines and mitigation will include a mixture of onsite habitat creation, offsite habitat creation, or the purchase of offsite mitigation credits at an established mitigation bank. Compensatory mitigation will be no less than a 1:1 replacement ratio to guarantee a no net loss of riparian habitat, but this mitigation ratio is negotiated during the permit acquisition process on a project-by-project basis.

The WLC site also incorporates a number of potential offsite improvements. All offsite improvements east of Redlands Boulevard may potentially impact drainage features likely considered jurisdictional by USACE, RWQCB, and CDFW. Once these offsite improvements have been finalized, a project specific jurisdictional delineation will be required in order to document the existing conditions, potential impacts, and recommended mitigation measures.

The previous jurisdictional delineation report[1] conducted in 2012 concluded that the WLC site contained 14 drainage features including four roadside ditches, seven isolated drainage features, and three isolated features. All 14 drainage features lack direct connectivity to any downstream Traditional Navigable Waters (TNWs) or any other Relatively Permanent Waters (RPW). The four roadside ditches lack riparian vegetation and only convey nuisance flows from localized runoff from the adjacent road. These flows eventually revert to sheet flow within the survey area and have no direct connectivity.

According to the 2012 report, the three isolated features include an abandoned water quality detention basin and two abandoned basins associated with previous cattle activities. The water quality basin is a temporary facility that was constructed to treat drainage flows resulting from the construction of the Skechers facility. The two isolated basins were previously used to collect polluted runoff from the associated cattle facility. The facility included concrete-lined areas to contain cattle in a dairy operation. Animal waste would be collected in the basins to protect downstream water quality. The livestock facilities have been removed and the basins are no longer functioning.

The 2012 report determined that the on-site features did not meet the minimum requirements to be considered jurisdictional by regulatory agencies due to the following:

- Lack of connectivity to any downstream waters of the US or waters of the State.
- Absence of a consistent bed and bank and/or ordinary high water mark (OHWM).
- Low biological resource value.
- The roadside ditches and agricultural drainages drain only upland areas and do not carry relatively permanent water flows.
- No jurisdictional wetlands occur within the WLC site.

Important Note. Although the JD report from 2012 concluded the onsite drainages were not jurisdictional, the 2013 JD report has amended that conclusion based on comments by the state and

[1] *Jurisdictional Delineation Report*, Michael Brandman Associates, April 23, 2012.

Federal resource agencies. The 2013 JD report concludes there are two (2) drainage channels on the WLC site (Drainages 12 and 15) that are considered jurisdictional by both Federal and state agencies, while drainages 7, 8, and 9 are considered jurisdictional by the CDFW and the RWQCB. The location and extent of these on-site drainages in relation to the project site are illustrated in previously referenced Figure 4.4.2.

4.4.2 Existing Policies and Regulations

4.4.2.1 Federal Regulations

Federal Endangered Species Act (FESA). The FESA was enacted to protect any species of plant or animal that is endangered or threatened with extinction. Section 9 of the FESA prohibits "take" of federally threatened or endangered wildlife. Take, as defined under the FESA, means to harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct (16 USC 1532[19]). Section 9 also prohibits the removal and reduction of endangered plants from lands under Federal jurisdiction, and the removal, cutting, digging, damage, or destruction of endangered plants on any other area in "knowing violation of State law or regulation."

Section 9 of the FESA (16 USC 1538) prohibits take of a federally listed endangered species of fish or wildlife except pursuant to a permit and HCP approved under Section 10(a) of the FESA (16 USC 1539). The FESA prohibitions and requirements are different, however, for endangered species of plants. Section 9 prohibits the take of endangered plants only from areas under Federal jurisdiction, or if such take would violate state law.

Development of the WLC site is located on private land. For listed plants located on private land, formal consultation with the USFWS is required when a project has a Federal "nexus" (i.e., a Federal permit is required or Federal funding is involved). In the absence of a Federal nexus, a project does not require a permit under the FESA for impacts to listed plants on private lands.

Clean Water Act. The USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act (CWA) is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an ordinary high water mark (OHWM). In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

In 2006, the United States Supreme Court in *Rapanos v. United States* 574 U.S. 715 (2006) addressed CWA jurisdiction over wetlands adjacent or abutting navigable, non-navigable and ephemeral tributaries and jurisdiction over permanent and relatively permanent non-navigable tributaries. According to the United Sates Supreme Court, the CWA does not assert jurisdiction over upland erosional features, gullies, and roadside ditches that have infrequent, low volume, and short duration of water flow. The USACE uses a significant nexus analysis. A water body is considered to have a "significant nexus" with a traditional navigable water (TNW)[1] if its flow characteristics and functions in combination with the ecologic and hydrologic functions performed by all wetlands adjacent to such a tributary, affect the chemical, physical, and biological integrity of a downstream traditional navigable water. Additional information is provided in the Environmental Protection Agency (EPA) memorandum titled "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United*

[1] A "traditional navigable water" includes all of the "navigable waters of the United States," defined in 33 C.F.R. § 329 and by numerous decisions of the Federal courts, plus all other waters that are navigable-in-fact.

States & Carabell v. United States," dated June 5, 2007 (USACE 2007), and also the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE and EPA 2007).

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB may also regulate discharges to "waters of the State," including wetlands, under the California Porter-Cologne Water Quality Control Act.

4.4.2.2 State Regulations

California Endangered Species Act (CESA). The CESA is similar to the FESA in that its intent is to protect species of fish, wildlife, and plants that are in danger of, or threatened with, extinction because their habitats are threatened with destruction, adverse modification, or severe curtailment, or because of overexploitation, disease, predation, or other factors.

"Take" as defined under CESA means hunt, pursue, capture, or kill, or attempt to hunt, pursue, capture, or kill. Under certain conditions, CESA has provisions for take through a 2081 Permit or a Section 2081 Memorandum of Understanding. The impacts of the authorized take must be minimized and fully mitigated. No permit may be issued if the issuance of the permit would jeopardize the continued existence of the species.

California Environmental Quality Act. Section 15380(b) of the *CEQA Guidelines* provides that a species not listed on the Federal or State lists of protected species may be considered rare or endangered if the species can be shown to meet specified criteria. These criteria have been modeled after the definitions in FESA and CESA and § 2780–2781 of Article 1 of the California Fish and Game Code dealing with the California Wildlife Protection Act of 1990. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW.

California Fish and Game Code Section 3503 and the Migratory Bird Treaty Act. Section 3503 of the California Fish and Game Code prohibits the destruction of bird nests except as otherwise provided for in the Fish and Game Code. The MBTA similarly protects the nests of migratory birds. These regulations apply to the individual nests of these species, but do not regulate impacts to the species' habitats.

Raptor Protection. The California Fish and Game Code (Fish and Game Code, Sections 3503, 3503.5, 3505 and 3513), and California Code of Regulations (Title 14, Sections 251.1, 652 and 783-786.6) have specific provisions for the protection of raptors (birds of prey).

Streambed Alteration Agreements. Sections 1600 et seq. of the California Fish and Game Code define the responsibilities of the CDFW and require public and private applicants to obtain an agreement for projects that would "divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake designated by the CDFW in which there is at any time an existing fish or wildlife resource or from which those resources derive benefit, or would use material from the streambed designated by the department." CDFW wardens and/or unit biologists typically have the responsibility for formulating and issuing Streambed Alteration Agreements. The CDFW, through provisions of the Code (Sections 1601–1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW.

Native Plant Protection Act (NPPA). Sections 1900–1913 of the California Fish and Game Code (Native Plant Protection Act) direct the CDFW to carry out the Legislature's intent to "… preserve, protect and enhance endangered or rare native plants of this state." The NPPA gives the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take.

4.4.2.3 Regional Regulations

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the MSHCP. The MSHCP is a multi-jurisdictional effort that provides a regional conservation solution to species and habitat issues. The underlying goal of the MSHCP is to protect multiple species by preserving a variety of habitat and providing linkages between different habitat areas and other undeveloped lands. The MSHCP allows Riverside County and its cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of CESA and FESA. The overall goal of the MSHCP is to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth.

The MSHCP was adopted on June 17, 2003. The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the long-term conservation of species and their habitats in western Riverside County. The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of FESA as well as the Natural Communities Conservation Plan (NCCP) under the State of California. The CDFW also issued the NCCP Approval and Take Authorization for the MSHCP. As long as adherence to the policies and requirements of the MSHCP is maintained, participants in the MSHCP, which include the County of Riverside and fourteen cities (including the City of Moreno Valley), are allowed to authorize "incidental take" of plant and wildlife species of concern.

The MSHCP will eventually result in an MSHCP Conservation Area in excess of 500,000 acres and focuses on conservation of 146 species including amphibians, reptiles, birds, mammals, invertebrates, and plants. The MSHCP Conservation Area includes approximately 347,000 acres on existing Public/Quasi-Public Lands and approximately 153,000 acres of Additional Reserve Land. The MSHCP Plan Area encompasses approximately 1.26 million acres (1,966 square miles); it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the Cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. It provides a coordinated MSHCP Conservation Area and implementation program to preserve biological diversity and maintain the region's quality of life.

The MSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of FESA, as well as an NCCP under the NCCP Act of 2001. The MSHCP allows the City of Moreno Valley as well as other signatories of the Plan to authorize "Take" of plant and wildlife species identified within the Plan Area. The USFWS and CDFW have authority to regulate the Take of Threatened, Endangered, and rare Species. Under the MSHCP, the USFWS and CDFW can grant "Take Authorization" for otherwise lawful actions—such as public and private development that may incidentally Take or harm individual species or their habitat outside of the MSHCP Conservation Area—in exchange for the assembly and management of a coordinated MSHCP Conservation Area.

Of the 1.26 million acres covered by the MSHCP, 500,000 acres have been designated for preservation: 347,000 acres are already conserved as public or quasi-public land and another 45,270 acres have been acquired as habitat by the Regional Conservation Authority (RCA). According to the most recent RCA-MSHCP Annual Report, the City of Moreno Valley has a high-end goal of conserving 130 acres within its sphere of influence of the MSHCP; the City has already conserved 943 acres (RCA Annual Report 2010, Table 3). Altogether, Riverside County has reached 77 percent of the goal in the MSHCP.

Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). The USFWS issued a permit to the Riverside County Habitat Conservation Agency on May 3, 1996, for incidental take of Stephens' kangaroo rat (*Dipodomys stephensi*). The 30-year plan is designed to acquire and permanently conserve, maintain, and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions (including the City of Moreno Valley), and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied Stephens' kangaroo rat habitat in 7 Core Reserves encompassing over 41,000 acres. Currently 12,460 acres of occupied habitat exists within the Core Reserves.

4.4.2.4 City of Moreno Valley General Plan Policies

The specific policies outlined in the City's General Plan Conservation Element related to biological resources include:

Conservation Element

Policy 7.4.1 Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate setbacks to mitigate impacts to such areas.

Policy 7.4.3 Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.

Policy 7.4.5 The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multiple Species Habitat Conservation Plan.

4.4.3 Methodologies

The WLC site was assessed to determine consistency with the MSHCP focusing on conservation of species and their associated habitats in western Riverside County. The Riverside County Integrated Project (RCIP) Conservation Summary Report was first reviewed to determine habitat assessment and potential survey requirements for the study area. Geographic Information Systems (GIS) software was used to map the site in relation to MSHCP areas including Criteria Cells; conservation areas and linkages; Criteria Area Species Survey Areas for plant, bird, mammal, and amphibian species; Narrow Endemic Plants Survey Area; and survey requirements for inadequately covered species.

4.4.3.1 Literature Search

Prior to each field visit, a literature review, to determine environmental conditions occurring on the study area and the surrounding area was conducted. The primary objective of the review is to evaluate the potential for suitable habitat for sensitive plant and wildlife species, as well as to determine the applicability of other MSHCP and CEQA requirements as they pertain to the project. A compilation of sensitive plant and wildlife species recorded in the vicinity of the study area was derived from the CDFW's California Natural Diversity Data Base (CDFW 2012), a sensitive species and plant community account database. Additional recorded occurrences of plant species found on or near the planning area were derived from the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDB and CNPS search was based on the *Lakeview, Sunnymead*, and *El Casco, California* USGS 7.5-minute topographic quadrangles, encompassing 126 square miles. Additional recorded occurrences of these species found on or near the study area were derived from biota studies conducted for the MSHCP as well as studies conducted by MBA biologists for other projects over the years.

The MSHCP and CEQA also require an assessment to determine the potentially significant effects of the project on riparian/riverine areas and vernal pools. According to the MSHCP, the documentation

for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in the MSHCP's Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. This assessment is independent from considerations given to waters of the U.S. and waters of the State under the Clean Water Act (CWA) and California Fish and Game Code. This assessment has been completed for all of the study area but not in the zone of potentially indirect effects.

As part of the MSHCP requirements, an Urban/Wildlands Interface Analysis is required to address the indirect effects associated with locating proposed development in proximity to MSHCP conservation areas. The development may result in edge effects, which could potentially affect biological resources within the MSHCP Conservation Area. According to the MSHCP, the analysis should include an assessment of the potential indirect project impacts that may result from drainage features, toxics, noise, invasive species, barriers, access, and grading/development, as listed and described in the MSHCP's Section 6.1.4, *Guidelines Pertaining to Urban/Wildlands Interface*. For this study, the Urban/ Wildlands Interface Analysis was extended eastward to include indirect effects adjacent to Gilman Springs Road.

4.4.3.2 Habitat Assessment Survey

MBA originally assessed the planning area in 2005 and has conducted numerous additional surveys since then. Details of the survey dates and specific survey areas are provided in the 2012 MBA report (DEIR Appendix E). The WLC site, off-site facilities and the adjacent SJWA, were surveyed to determine the plant communities present, the suitability for Narrow Endemic and Criteria Area plant species, the presence of riparian areas, and the presence of suitable habitat for burrowing owl and Los Angeles pocket mouse. Parameters assessed included soil conditions, presence of indicator species, slope, aspect, and hydrology. ESA conducted update surveys in 2018 for Narrow Endemic plant species, burrowing owl, coastal California gnatcatcher, and Los Angeles pocket mouse.

4.4.3.3 Plants

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photographs. The plant communities within the planning area were classified according to the CDFW's List of Terrestrial Natural Communities (2003) and cross-referenced to descriptions provided in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986) and Oberbauer's Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions (1996). Common plant species observed during reconnaissance-level surveys in the planning area were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified off site using taxonomical guides. A list of all species observed on the study area was compiled from the survey data, shown in Appendix A of the MBA 2012 report (DEIR Appendix E).

ESA conducted a rare plant survey in 2018 focusing on three plant species having a moderate to high potential to occur based on the existing habitats within the Plan Area and known occurrences within the Project vicinity. These three species include thread-leaf brodiaea, smooth tarplant, and Coulter's goldfields. No special-status plant species were observed during the 2018 focused survey effort.

4.4.3.4 Wildlife

Wildlife species detected during field surveys in the planning area by sight, calls, tracks, scat, or other sign recorded during surveys in a field notebook by all biologists working on the project. Field guides were used to assist with identification of species during surveys. Although common names of wildlife species are fairly well standardized, scientific names are used in this report and are provided in Appendix A of the 2013 MBA report (DEIR Appendix E).

4.4.3.5 Riparian/Riverine and Vernal Pool Habitat

Aerial photography was reviewed prior to conducting general surveys to identify any potential natural drainage features and water bodies that may qualify as riparian/riverine. In general, the surface drainage features indicated as blue-line streams on USGS topographic quadrangle maps that were observed or expected to exhibit evidence of flow, can potentially support riparian/riverine areas. The WLC site was evaluated for any riparian/riverine and vernal pool habitat in 2005, 2007, 2012, 2013, and 2016.

4.4.3.6 Burrowing Owl

The WLC site is within the MSHCP burrowing owl survey area, and habitat assessments for burrowing owl (*Athene cunicularia hypugea*) were conducted 2005, 2006, 2010, 2012, 2013, and 2018 on various portions of the WLC site. Areas of suitable habitat, if present, were mapped onto an aerial photograph. Potential owl burrows, such as abandoned small mammal burrows, as well as manmade structures including earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles, or openings beneath cement or asphalt pavement are generally mapped onto an aerial photograph. The site was determined to have suitable habitat in a number of widespread locations, and owls were observed in various locations during the MSHCP fieldwork, so a focused survey was recently conducted in 2018.

A focused western burrowing owl survey was conducted for the proposed WLC site on seven separate days in 2013 and on four days in 2018. Under the MSHCP, the focused survey protocol was divided into two parts: 1) a Focused Burrow Survey; and 2) a Focused Burrowing Owl Survey. The focused survey was conducted during the breeding season (March 1–August 31) as defined under the MSHCP,[1] and also in accordance with the California Burrowing Owl Consortium's (CBOC) *Burrowing Owl Survey Protocol and Mitigation Guidelines*.[2] The species was observed during the most recent survey in 2018 conducted by ESA, and the species has been observed at other times in the past, and is assumed to be present due to the presence of suitable habitat and the fact they can occupy fallow agricultural fields relatively quickly. The MSHCP requires that pre-construction surveys be completed in areas of suitable habitat.

4.4.3.7 Los Angeles Pocket Mouse

Focused surveys for the Los Angeles pocket mouse (LAPM) (*Perognathus longimembris brevinasus*) were conducted in August 2005, June 2010, June 2012, July 2013, and May 2018 (see DEIR Appendix E). The surveys were conducted according to the established USFWS protocols for Pacific pocket mouse (*Perognathus longimembris longimembris*), a similar species. The current protocol requires trapping for 5 consecutive nights: conducted when the animal is active aboveground at night, during a new moon phase, if possible. No LAPM were observed in the WLC site during the focused surveys, although there is marginal habitat located in Drainages 7 and 9. MBA and ESA concluded that the WLC site was not occupied by LAPM. However, future surveys may be needed for development in areas of the site that contain suitable habitat for the project to be consistent with the long-term conservation goals of the MSHCP.

4.4.3.8 Jurisdictional Determination Report

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the WLC site and the previously cited USGS topographic maps were examined to determine the locations of potential areas of USACE/CDFW/RWQCB jurisdiction. Potential jurisdictional areas were field-checked for the presence of definable channels[3] and/or wetland vegetation, soils and hydrology. Suspected

[1] Western Riverside County Multiple Species Habitat Conservation Plan, Volume I, Dudek & Associates, June 17, 2003.
[2] Burrowing Owl Survey Protocol and Mitigation Guidelines, California Burrowing Owl Consortium, 1993.
[3] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) ion the Arid West Region of the United States: A Delineation Manual. ERDC/CRREL TR-08-12: Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover NH.

wetland habitats on the site were evaluated using the methodology set forth in the *U.S. Army Corps of Engineers 1987 Wetland Delineation Manual*[1] (Wetland Manual) and the *2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0).[2] The limits of USACE/CDFW/RWQCB jurisdiction were recorded using sub-meter GPS technology while in the field.

4.4.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, biological resource impacts would occur if the project would:

- Have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as endangered or threatened in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native or resident migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

4.4.5 Less than Significant Impacts

4.4.5.1 Adopted Policies and/or Ordinances

Threshold	Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Table 4.4-5 summarizes the City's General Plan and Municipal Code policies regarding biological resources and their consistency with the WLC site.

[1] Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[2] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Table 4.4-5: General Plan and Municipal Code Biological Resources Policies

Goals, Objectives, Policies, Ordinances		Project Consistency
City of Moreno Valley General Plan		
Objective 7.4	Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.	No significant riparian or other biologically sensitive habitat is on or adjacent to the WLC site. The project is consistent with this objective.
Policy 7.4.1	Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.	No significant riparian or other biologically sensitive habitat is on or adjacent to the WLC site. The project is consistent with this policy.
Policy 7.4.2	Limit the removal of natural vegetation in hillside areas when retaining natural habitat does not pose threats to public safety.	Limited stands of natural plant communities or stands of native vegetation occur in the WLC site within hillside areas. These areas are proposed as open space under the proposed action. The project is consistent with this policy.
Policy 7.4.3	Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.	The study area contains 14 drainages and/or basins. As specific projects are designed within the WLC site, consistency with the policy will have to be determined.
Policy 7.4.4	Incorporate significant rock formations into the design of hillside developments.	The WLC site is generally not a hillside area. Limited natural rock formations occur in a proposed open space area. The project is consistent with this policy,
Policy 7.4.5	The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multiple Species Habitat Conservation Plan.	See Consistency with Chapter 3.48 of the City of Moreno Valley Municipal Code below.
City of Moreno Valley Municipal Code		
Title 3 Revenue and Finance		
Chapter 3.48 MSHCP Fee Program (Ordinance 742 Section 1.1, 2007)	Establish a local development mitigation fee to assist in the maintenance of biological diversity and the natural ecosystem processes that support this diversity; the protection of vegetation communities and natural areas within the city and western Riverside County which are known to support threatened, endangered or key sensitive populations of plant and wildlife species; the maintenance of economic development within the city by providing a streamlined regulatory process from which development can proceed in an orderly process; and the protection of the existing character of the city and the region through the implementation of a system of reserves which will provide for permanent open space, community edges, and habitat conservation for species covered by the MSHCP.	MBA conducted an MSHCP Consistency Analysis for the project in 2012 and found that the WLC site area is within the MSHCP fee area. Impacts are potentially consistent; however, mitigation is provided.

Table 4.4-5: General Plan and Municipal Code Biological Resources Policies

Goals, Objectives, Policies, Ordinances		Project Consistency
Title 8 Buildings and Construction		
Chapter 8.60 Threatened and Endangered Species (Ordinance 502 Section 2.1, 1996)	Adopt and require certain implementation measures as required by the Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP), the Section 10(a) Permit and the Management Authorization; and to adopt and impose an impact and mitigation fee to provide funds to the Riverside County Habitat Conservation Authority to implement the terms of the SKRHCP.	The WLC site is located within the known range of SKR. The study area is also located within the SKRHCP fee area and not in the SKRHCP Core Reserve Area. Impacts are potentially not consistent; however mitigation is provided.

Sources: City of Moreno Valley General Plan, 2006; City of Moreno Valley Municipal Code.

This analysis indicates the project is consistent with local policies and ordinances protecting biological resources that apply to the WLC site. Compliance with State and Federal regulations to ensure protection and preservation of significant biological resources, and the implementation of the MSHCP are the applicable policies/programs that the project must implement. As there are no other local policies or ordinances regarding the protection of biological resources identified by the City or other local jurisdiction applicable to the WLC site, no impact would occur and no mitigation is required.

4.4.5.2 Adopted Habitat Conservation Plans

Threshold	Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is subject to the provisions of two HCPs: the SKR HCP and the MSHCP. Impacts related to these HCPs are discussed in this section.

a. Stephens' Kangaroo Rat Habitat Conservation Plan

The WLC site is within the SKR HCP Fee Area. The SKR is relatively widespread throughout the SKR HCP Fee Area, but the main blocks of occupied habitat are concentrated in several Core Areas that must be conserved. The WLC site is not within an SKR Core Area. The SKR also requires species-specific monitoring and management to ensure its long-term viability in the SKR HCP, including tracking population densities and maintaining sparse, open grassland habitats. The recently released Draft Land Management Plan for the San Jacinto Wildlife Area proposes an SKR resource area in the northeast portion of the SJWA, adjacent to Gilman Springs Road and the WLC site.[1]

The long-term SKR HCP provides Take Authorization for the SKR within its boundaries. The core reserves established by the SKR HCP will be managed as part of the MSHCP Conservation Area consistent with the provisions of the SKR HCP. Focused surveys for Stephens' kangaroo rat will not be required for this project because the project lies within the SKR Fee Area; therefore, no requirements under the SKR HCP other than payment of a local fair share mitigation fee to acquire additional SKR conservation lands are required.

b. Summary of Western Riverside County Multiple Species Habitat Conservation Plan Impacts

The WLC site is located within the Reche Canyon/Badlands Area of the MSHCP. Development of the WLC site would not conflict with the conservation goals established by the MSHCP for Cell Group X or Cell Group E. In addition, no conflict from development would occur in relation to the Reche

[1] "Draft Land Management Plan for the San Jacinto Wildlife Area." Department of Fish and Wildlife, 2017.

Canyon/Badlands Area Plan, the Area Plan Subunit 4, the Area Plan Subunit 3, Proposed Core 3, or Existing Core H.

The WLC site and the proposed offsite facilities occur immediately adjacent to the vicinity of Core H and proposed Core 3. RCA staff commented that they believed any increase in truck traffic associated with the WLC project along Gilman Springs Road could significantly affect wildlife movement between Core H and proposed Core 3 and requested mitigation to offset those impacts. However, the appropriate mitigation for increased traffic on Gilman Springs Road is payment of the project's fair share of the improvements to Gilman Springs Road, including provisions for wildlife movement or crossings. The design and improvement of Gilman Springs Road is a County project that is not under the control of the project applicant or the city. In addition, the WLC project site supports limited habitat suitable to promote wildlife movement because of the lack of vegetative cover.

No development will be allowed within 250 feet of the SJWA. However, development that will be near the SJWA may cause significant indirect impacts to species within the SJWA, which will require mitigation that may include a fair share contribution toward safety improvements along Gilman Springs Road.

The WLC site is adjacent to Cell Group D and Proposed Core 3, it is not near any Linkages identified in the MSHCP. However, it is adjacent to the SJWA and is subject to the project guidelines provided in MSHCP Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface). The project is also required to adhere to the Best Management Practices (BMPs) found in Appendix C of the MSHCP.

The WLC project does not propose to alter land use in any way that would adversely affect Cores, Linkages, or Reserve Assembly within the Reche Canyon/Badlands Area Plan.

The WLC project is not located within any Amphibian, Mammalian, or Special Linkage Areas identified by the MSHCP. The project is in an area requiring burrowing owl surveys, is within the MSHCP Criteria Area Species Survey Area (CASSA), and is within the Narrow Endemic Plant Species Survey Area (NEPSSA).

The MSHCP and its Implementation Agreement contain a fee mitigation program pursuant to which local agencies collect development impact fees and remit such fees to the Riverside Conservation Authority (RCA). These fees are in turn used to acquire lands that are suitable for habitat preservation for species covered by the MSHCP. Payment of the local MSHCP mitigation fee will be required of the project prior to the issuance of building permits. The MSHCP provides that payment of the fee completely mitigates a project's environmental impacts.

From available information, potential indirect impacts to avian and other biological resources within the SJWA will be reduced to less than significant levels by the creation of a 250-foot on-site setback in **Mitigation Measure 4.4.6.1A**. Project design features and associated setbacks previously described will reduce project impacts to adjacent biological resources to less than significant levels. As required by the October 17, 2014 JPR, the WLC Project must implement the guidelines contained in MSHCP Section 6.1.4 related to controlling adverse effects for development adjacent to the MSHCP Conservation Area, of which there are seven specific conditions. Therefore, the WLC project would have a less than significant impact in regard to the MSHCP.

Participation in the MSHCP and contribution of MSHCP provides compensation for the loss of raptor foraging habitat due to approved projects. A project proponent is required to participate as outlined in the MSHCP, so that loss of raptor foraging habitat is considered to be less than significant and no mitigation is required.

Narrow Endemic Plant Species. No Narrow Endemic plant species are anticipated to occur in the WLC site, but compliance with **Mitigation Measure 4.4.5.2A** will assure there will be no significant impacts to these plant species.

Criteria Area Plant Species. No Criteria Area plant species are anticipated to occur on the WLC site, but compliance with **Mitigation Measure 4.4.5.2A** will assure there will be no significant impacts to these plant species.

Riparian/Riverine Areas and Vernal Pools. Drainage Features 7, 8, 9, 12, and 15 contain riparian/riverine areas, as designated by the MSHCP. The WLC site does not contain habitat suitable for covered riparian species, such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. No vernal pools or ephemeral ponds were observed on the WLC site and no suitable habitat for any fairy shrimp species was identified on site. No additional mitigation regarding vernal pools or vernal pool species is required. A programmatic-level DBESP was prepared by MBA in 2013 to outline specific requirements for project related impacts to these features in the future. A project-specific DBESP will be required for each development project within the WLC.

c. Nitrogen Deposition

Nitrogen deposition is the term used to describe nitrogen-based pollutants that are deposited as a result of emissions from future project related activities. The pollutants are typically in the form of nitrogen oxide (NO_x) and ammonia (NH_3)-derived pollutants, primarily nitric acid (HNO_3). Although there are many types of nitrogen-based pollutants resulting from project-related emissions, HNO3 is typically the easiest to measure and is used in determining nitrogen deposition rates. Mechanisms by which nitrogen deposition can lead to impacts on sensitive species include (1) direct toxicity, (2) changes in species composition among native plants, and (3) enhancement of invasive species (Fenn et al. 2003; Weiss 2006a). Direct toxicity refers to impacts associated with direct contact with the nitrogen pollutants. There is no scientific documentation that links direct toxicity to impacts associated with sensitive plant and wildlife species. Therefore, direct toxicity is not considered a significant impact.

An increase in available nitrogen promotes the growth of non-native weedy species, which alone is not considered a significant impact. The increased dominance and growth of invasive annual grasses is especially prevalent in low-biomass vegetation communities that are naturally nitrogen-limited, such vegetation communities that occur in the project vicinity include coastal sage scrub and vernal pools (Weiss 2006a). An increase in nitrogen deposition does not inhibit the growth of native plants, but promotes the rapid growth of non-native invasive species that could out-compete native plants for available water and nutrients. If the increase of non-native plant species is detrimental to the growth of native plants, the result may be a conversion from a native plant community to a non-native plant community. This change in habitat is only considered a significant impact if that change occurs in suitable habitat for a federally threatened or endangered species within USFWS-designated critical habitat.

In addition, vernal pools were identified by Weiss (2006a) as a California ecosystem that may be sensitive to nitrogen deposition. Nitrogen deposition in vernal pools stimulates plant growth (including non-native species in adjacent uplands) and the nitrogen is rapidly assimilated by plants and invertebrates within the pools (biomass and dissolved organic nitrogen) (Hobson and Dahlgren 1998). Because of the isolated nature of vernal pools, the nitrogen pollutants accumulate over time and provide a more concentrated level of nitrogen for non-native plants. Since vernal pools are known to provide suitable habitat for a number of federally threatened or endangered species, impacts to vernal pools caused by nitrogen deposition may be considered a significant impact. There are no vernal pools within the WLC site.

Although non-native plant invasions have affected the vernal pools in the region (the closest recorded occurrence of vernal pool habitat is approximately 3.5 miles to the south), these invasions generally occur in years when precipitation is sparse. In wetter years, the number of non-native plants is reduced since the non-native upland species are intolerant of inundation and the invasion cycle may be reset in some cases. This means that the established non-native plants are not adaptable to an aquatic habitat and die-off during prolonged periods of inundation. Even though the non-native plant species will have an abundance of available nitrogen and optimum growing conditions, the prolonged inundation periods prohibit non-native invasive species growth.

The WLC will consist of mobile, non-point pollution sources (diesel trucks), which will result in a highly random dispersion of emissions that will occur in a broad, regional fashion. Because of the way in which nitrogen is generated by the WLC project, its overall patterns for dispersion, and the multi-variant parameters that would need to be taken into consideration for such an analysis, there is no established scientific basis or standards to study the effects of nitrogen dispersion for non-point pollution sources; hence, project-specific conclusions or mitigation would be overly speculative for the purposes of this Revised Sections of the FEIR.

Specific Plan Design Features. The project is consistent with the MSHCP requirements relative to core areas, criteria cells, threatened and endangered species. In addition, the WLC project complies with the MSHCP guidelines for urban/wildland interface, riparian/riverine areas, or related buffers (with implementation of **Mitigation Measure 4.4.6.1A**). In addition, future development will be required to demonstrate that it is also consistent with all MSHCP requirements, including indirect impacts such as lighting, noise, and air pollution effects.

Regulatory Compliance. Stephens' kangaroo rats have a low potential to occur within the study area. While the study area is not within the SKR Core Reserve Area, the SKR HCP Implementing Agreement requires payment for loss of habitat within defined areas. The entire WLC site lies within the fee area. An assessment of individual actions for development within the WLC site would be required prior to any implementation. The number of acres of disturbance associated with the development and any off-site improvements will require payment to comply with the SKR HCP. In addition, prior to issuance of a grading permit on each project, applicants will be required to pay the mandatory mitigation fee for the MSHCP. The mitigation fee is a per acre fee for commercial or industrial development. Payment of the fee is considered complete mitigation of a project's environmental impacts.

Mitigation Measures. In addition to payment of SKR and MSHCP impact fees, the following measures are recommended to ensure that potential impacts to sensitive species are reduced to less than significant levels:

4.4.5.2A Each Plot Plan application shall include a focused plant survey of the proposed development site prepared by a qualified biologist to identify if any of the following sensitive plants (i.e., Coulter's goldfields, smooth tarplant, Plummer's mariposa lily, or thread-leaved brodiaea) are present. If any of the listed plants are found, they may be relocated to the 250-foot setback area outlined in the Specific Plan and discussed in Mitigation Measure 4.4.6.1A. Alternatively, at the applicant's discretion, an impact fee may be paid to the Western Riverside County Regional Conservation Authority (RCA) or other appropriate conservation organizations to offset for the loss of these species. This measure shall be implemented to the satisfaction of the Planning Official.

4.4.5.2B Prior to the approval of any tentative maps for development including or adjacent to any Criteria Cells identified in the Western Riverside County Multiple Species Habitat Conservation Plan, the applicant shall prepare and process a Joint Project Review (JPR) with the Riverside County Regional Conservation Authority (RCA). All criteria cells shall be identified on all such tentative maps. This measure shall be implemented to the satisfaction of the City Planning Division and Riverside County Resource Conservation Agency ("RCA").

In addition, the **Mitigation Measures 4.4.6.1A and 4.4.6.1B** described below will also help reduce potential direct and indirect impacts to biological resources covered by the MSHCP.

Potential impacts related to MSHCP consistency will be less than significant. With implementation of **Mitigation Measures 4.4.6.1A, 4.4.6.1B, 4.4.6.2B, 4.4.5.2A,** and **4.4.5.2B**, the less than significant impacts related to MSHCP consistency will be further reduced.

4.4.5.3 Habitat Fragmentation/Wildlife Movement

Threshold	Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates the two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

The WLC site contains no significant cover of native plant communities and currently experiences heavy disturbance associated with agricultural activities. Additionally, the WLC site is adjacent to SR-60 and Gilman Springs Road on the north and east and is bordered by urban development on the west. The nearest linkage area as identified under the MSHCP is Proposed Linkage 5 and is located approximately 3 miles north of the project and approximately 3.6 miles south of the project is Proposed Constrained Link 20. The development of the WLC site will not impede the movement of any wildlife; therefore, the project will not affect any wildlife movement corridor.

The SJWA currently provides foraging habitat for various resident and migratory wildlife species. The southern portion of the WLC site adjacent to the SJWA lands has been actively farmed for decades and is regularly disked. The northern portion of the SJWA is designated as open space and no development is proposed for this area.

Although the WLC site does not contain any designated wildlife movement corridors or MSHCP linkages (i.e., MSHCP, City General Plan, etc.), it is likely that wildlife moves through adjacent properties such as the SJWA and the Mystic Lake area to the south, the Badlands area to the east and the Lake Perris State Recreation Area to the southwest. The MBA project biological report concluded, which was confirmed in the 2018 surveys by ESA, that development of the project as WLC site would not directly have any significant impact on wildlife movement in the area, and would not fragment habitat or adversely affect wildlife movement through the surrounding areas because the WLC site contains limited vegetation cover and minimal resource value for wildlife moving between habitat blocks. The biological report also determined that the WLC site would not impede or minimize any significant wildlife corridor for the target species associated within the Reche Canyon/Badlands Area plan, which include Bell's sage sparrow (*Amphispiza belli belli*), cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), loggerhead shrike (*Lanius ludovicianus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), bobcat (*Lynx rufus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), mountain lion (*Puma concolor*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Stephens' kangaroo rat (*Dipodomys stephensi*), and Nevin's barberry (*Berberis nevinii*). In addition, although not required, Drainage 9, comprising the most suitable habitat in the eastern portion of the WLC site, is being retained to allow for wildlife movement between the Badlands and the SJWA (e.g., relatively natural channel conditions with 50-foot setbacks on either side of the channel through the WLC site property. These project design features will maintain a wildlife travel path along Drainage 9. Therefore, impacts related to wildlife movement are less than significant, and no mitigation is needed.

4.4.6 Significant Impacts

4.4.6.1 Endangered and Threatened Species

Impact 4.4.6.1: *The project may have significant impacts on listed species.*

Threshold	Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered or threatened in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Of the special-status plant and animal species that have the potential to occur within the general vicinity of the WLC site, 17 plant and animal species are designated as endangered or threatened by State and/or Federal authorities (Table 4.4-6). One of these species, coastal California gnatcatcher, was observed but none of the other species are believed to be present on the WLC site; it is possible the listed birds may utilize the SJWA on a seasonal basis.

Table 4.4-6: Endangered/Threatened Species Within the WLC site

Species	Status Designation	Potential for Occurrence
Munz's onion *Allium munzii*	Federal: Endangered State: Threatened	Not Expected
San Diego ambrosia *Ambrosia pumila*	Federal: Endangered State: None	Not Expected
Marsh sandwort *Arenaria paludicola*	Federal: Endangered State: Endangered	Low
Nevin's barberry *Berberis nevinii*	Federal: Endangered State: Endangered	Not Expected
Thread-leaved brodiaea *Brodiaea filfolia*	Federal: Endangered State: Threatened	Not Expected
Slender-horned spineflower *Dodecahema leptoceras*	Federal: Endangered State: Endangered	Not Expected
Spreading navarretia *Navarretia fossalis*	Federal: Threatened State: None	Not Expected
California Orcutt grass *Orcuttia californica*	Federal: Endangered State: Endangered	Not Expected
Vernal pool fairy shrimp *Brachinecta lynchi*	Federal: Threatened State: Special Animal	Not Expected
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: Endangered State: Special Animal	Not Expected
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: Endangered State: Special Animal	Not Expected
California tiger salamander *Ambystoma californiense*	Federal: Threatened State: Species of Special Concern	Not Expected
Southwestern willow flycatcher *Empidonax traillii extimus*	Federal: Endangered State: Special of Special Concern	Not Expected
Coastal California gnatcatcher *Polioptila californica californica*	Federal: Threatened State: Special of Special Concern	Present
Least Bell's vireo *Vireo belli pusillus*	Federal: Threatened State: Special of Special Concern	Not Expected
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: Threatened State: Special of Special Concern	Not Expected
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: Endangered State: Threatened	Not Expected

Source: *MSHCP Compliance Report,* Michael Brandman Associates. April 23, 2012 Appendix E-1.

The potential for occurrence determination was based on the results of focused biological resource surveys, and/or the lack of suitable habitat in the project limits for the referenced species. One Federal or State endangered/threatened species, coastal California gnatcatcher, was detected on the WLC site during the focused biological resource surveys, for which mitigation is included. It is also reasonable to conclude that, at a minimum, indirect impacts to listed species may be significant, and mitigation is required.

Coastal California gnatcatcher is a Covered Species in the MSHCP and is considered Adequately Conserved. Consistent with the MSHCP requirements, Mitigation Measure **4.4.6.3A** prevents suitable habitat from disturbance during the breeding season. Active bird nests are protected by both the Migratory Bird Treaty Act and sections of the California Fish and Game Code.

Project or Specific Plan Design Features. The World Logistics Center Specific Plan provides for a number of project design features to address the interface between the WLC site and the SJWA. These features include enhanced landscaping along the southern boundary, restrictions on site lighting, restrictions on native/drought-tolerant landscape materials, the installation of special drainage facilities, restrictions on public access, special architectural standards for building elevations facing the SJWA, restrictions on the orientation of adjacent buildings, signage restrictions, and other development guidelines intended to create an interface area that is sensitive to the unique relationship between the project and the SJWA.

The Specific Plan establishes a 250-foot wide development setback from the southernmost property line along the SJWA boundary, and an additional 150-foot building setback from the development setback to help minimize potential impacts on biological resources of the SJWA.

The Specific Plan includes development restrictions that may affect off-site areas such as the SJWA, including architecture and building design, landscaping, and off-site lighting:

- *Architecture and Building Restrictions (Specific Plan Section 4.1).* Sections 4.1.2 and 4.1.3 require ground- and roof-mounted equipment to be screened from off-site view.

- *Landscaping Restrictions (Specific Plan Section 4.2).* Section 4.2.4 provides "Special Edge Treatment Areas" in terms of adjacent land uses, including the SJWA (Section 4.2.4.3) and Gilman Springs Road (Section 4.2.4.4).

- *Off-site Lighting (Specific Plan Section 4.3).* Section 4.3.1 indicates one of the main objectives of the project lighting is "… all lighting in the vicinity of the San Jacinto Wildlife Area shall be designed to confine all direct light rays to the project site and preclude the visibility of direct light rays from the wildlife area" (page 4-42). The project will also have to comply with the City's new Dark Sky Lighting Ordinance, which reduces spillover light to 0.25 foot-candles at five feet from the adjacent property lines.

- *Setbacks* - The Specific Plan provides for a 250-foot development setback and an additional 150-foot building setback adjacent to the SJWA. The development setback area would include landscape areas, drainage facilities, site fencing and walls, etc. According to available research previously presented in Section 4.4.1.18a, a 250-foot development setback is adequate for a project-SJWA separation and is supported by a compilation of available academic and scientific literature and studies on wildlife impacts from diesel emissions, and also the distance established in nesting bird surveys for setbacks from human activity. In addition, the Specific Plan requires solid walls along the property line, which will help provide an additional a buffer from building lighting and noise and effectively mitigate potential direct and indirect impacts on the SJWA.

Roadkill. As development occurs within the WLC site, some local wildlife will be injured or killed by the additional vehicles and trucks on SR-60, Gilman Springs Road, Redlands Boulevard north of Eucalyptus Avenue, and all internal WLC site roads. There is no accurate way to quantify this impact,

since there are no data on existing roadkill on these roadways. However, it is reasonable to assume this impact will increase linearly (from current levels) as project-related traffic increases. It should be noted that development within the WLC site along the west side of Gilman Springs Road will be separated from the roadway by fencing or walls as appropriate; this will help restrict human access to Gilman Springs Road and native areas along the east side of the roadway, and may incrementally reduce roadkill along Gilman Springs Road. Native wildlife will still experience incremental adverse impacts from roadkill along Gilman Springs Road as the WLC project develops in the future, but these impacts would be less than significant as long as the County coordinates with the RCA and takes wildlife movement between Core H and proposed Core 3 into account when designing and improving Gilman Springs Road.

Operational Noise. The northern portion of the SJWA will experience increased, fluctuating sound levels during construction and operation (e.g., vehicle traffic and truck loading and unloading), but truck traffic and human activity will result in an incremental increase in overall ambient sound over the long term. In addition, it is possible construction activities on the WLC site, including areas adjacent to the SJWA, may be subject to construction activity on a 24-hour-per-day, 7-day-per-week schedule. The calculations in Table 4.4-7 were provided by the project noise consultant (Mestre Greve Associates) specifically for the southern boundary area of the project.

The portion of the SJWA immediately south of the WLC site is vacant and the northern 135 acres immediately adjacent to the WLC site has been regularly disked for dry farming. This area is quiet, with L_{eq} levels during the day of 40.8 dB and nighttime levels of 35.8 dB. Existing noise levels in the northern SJWA area are affected by road noise from Gilman Springs Road to the east and from noise generated at the existing natural gas facilities.

Table 4.4-7: Noise Levels along the WLC Site Southern Boundary

Noise Conditions	Daytime (dB)			Nighttime (dB)		
	L_{min}	L_{eq}	L_{max}	L_{min}	L_{eq}	L_{max}
Ambient Noise	35.9	40.8	50.3	30.0	35.8	51.1
Warehousing Noise						
50 feet	38.3	48.6	63.1	38.3	48.6	63.1
100 feet	37.5	47.8	62.3	37.5	47.8	62.3
250 feet	34.4	44.7	59.2	34.4	44.7	59.2
500 feet	30.6	40.9	55.4	30.6	40.9	55.4
Warehousing Noise Plus Ambient[1]						
50 feet	38.3	49.3	63.1	38.3	48.8	63.1
100 feet	37.5	48.6	62.3	37.5	48.1	62.3
250 feet	35.9	46.2	59.2	34.4	45.2	59.2
500 feet	35.9	43.9	55.4	30.6	42.1	55.4
Change in Ambient Noise Levels[2]						
50 feet	2.4	8.5	12.8	8.3	13.0	12.0
100 feet	1.6	7.8	12.0	7.5	12.3	11.2
250 feet	0.0	5.4	8.9	4.4	9.4	8.1
500 feet	0.0	3.1	5.1	0.6	6.3	4.3

1 Distances are in feet, noise levels are in dBA.
2 L_{eq} noise added logarithmically, L_{max} and L_{min} will not add in this situation.
Highest L_{max} and highest L_{min} were used.
3 Ambient Noise levels reported by ESA in March 2018.
Please refer to Section 4.12 for a description of noise measurement terms. .

The noise data in Table 4.4-7 indicate that warehousing activity would raise ambient noise levels (measured at 50 feet) by 8.5 dB during the day and 13 dB at night. The physical setback of the project design would separate the warehouse structures from the SWJA reducing noise impacts, with the estimated noise levels shown in Table 4.4-7. The project design separation of warehouse structures from the SWJA would be 400 feet at the SWJA boundary (the combined 250-foot wide development setback from the southernmost property line with the additional 150-foot building setback).

These calculations show that the increase in noise levels from development would be close to 3 dB at a distance of 500 feet, resulting in overall noise levels (ambient plus development) of 43.9 dB measured at a distance of 500 feet (L_{eq}) during the day and 42.1 dB at 500 feet at night. Recent noise modeling by ESA (2018) concludes that nighttime operational noise levels would not exceed 55 dB at the WLC site boundary and the highest noise level expected at the SJWA boundary during construction would be 52 dB.

In addition to regular background noise contributions from traffic on Gilman Springs Road and the compressors at the SDG&E plant that run 24 hours per day, the SDG&E compressor plant has regular "blow-down" events, which is an automatic pipeline pressure relief process. When these occur, noise levels in the SJWA adjacent to the compressor plant property lines may reach 130 dB or higher, which is equivalent to a jet plane landing or a train horn at 100 feet. For more information on "blow-down" effects to humans, see Section 4.12, *Noise*, and 4.8, *Hazards and Hazardous Materials*. It should be noted that the pump noise and the blow-down events have been occurring regularly for many years, along with their potential impacts on SJWA wildlife; however, these utility facilities already exist and are not part of any development proposed within the WLC site.

Based on available information, it is reasonable to conclude that increased noise from human activity (project construction, traffic on local roads, loading and unloading of trucks, etc.) related to the project will not have significant impacts on local wildlife in the SJWA area. Available research indicates that increased noise levels near wildlife areas can contribute to behavioral changes such as increased startling in birds, which can be especially harmful during nesting periods, hunting pattern changes or avoidance which decrease habitat value and use, sleep pattern disruption, and decreased overall health from noise stress. These impacts can affect mammals, birds, and other species present within the SJWA. For these reasons, human activity should be set back from the SJWA to help minimize these impacts. The WLCSP requires there be a 250-foot minimum development setback and an additional 150-foot building setback along the southern boundary of the WLC site to act as a buffer between the WLC SITE and the SJWA. With implementation of the two setback areas (total 400 feet) and proposed solid walls along the SJWA boundary, the anticipated increase in noise from the project will not have a significant impact on wildlife and would not require mitigation.

Construction Noise. Development within the WLC site and off-site facilities must incorporate landscape elements including trees, shrubs, and groundcover, which would assist in off-site noise reduction. A noise analysis has been prepared for the project to quantify potential short-term and long-term noise impacts that could occur as a result of development of the parcel adjacent to open space areas. Based on past studies (Landrum and Brown 2012), noise contours would exceed 60 dBA (L_{eq}) roughly 1,000 feet into the SJWA during construction of the southernmost areas of Phase 2. Any noise-related impacts would be temporary in nature and generally limited to construction of Phase 2 facilities along the southern boundary of the WLC site. Recent noise studies by ESA (2018) conclude that construction noise levels would not exceed 60 dB within the SJWA, with the highest construction noise level projected to be 52 dB at the SJWA boundary with the incorporation of the Specific Plan 250-foot setback.

Invasive Species. The WLCSP landscaping palette does not include any of the invasive plant species listed in Section 6.1.4 of the MSHCP (Table 6-2), but there should be mitigation to ensure that no on-site landscaping along the southern boundary of the site conflicts with MSHCP invasive plant guidelines.

Lighting. Lighting associated with planned warehouse development of the eastern and southern portions of the WLC site would have various direct and indirect impacts on local wildlife, depending on the species and the nature of light exposure. There is some scientific and academic research on the effects of night lighting on various species, even though the subject species and lighting conditions vary widely. This section generally compares the results of this research to the relationship of the project and the SJWA.

Some available research[1] states that night lighting can have a wide range of adverse effects on wildlife, including mammals, birds, bats, amphibians, insects, fish, even plants. Effects range from reduced health by upsetting diurnal rhythms, reduced clutch size, egg size, or survival success of nesting birds, to actual mortality from increased predation under higher ambient light levels. Bats and certain insects are also attracted to outdoor night lighting, which may adversely affect their survival or cause them to become dependent on the lighting. Small mammals would also be attracted to these areas and might suffer increased predation or roadkill crossing streets.

Future development within the WLC site will have to comply with the off-site lighting restrictions outlined in Section 4.3 of the Specific Plan, including the requirement that direct light rays from all lighting fixtures be directed downward, illuminate only the building or space intended, and do not spill onto adjacent properties (Section 9.08.100 Lighting 5.5.2.1). This will also apply to project-related development in Planning Areas 10 and 12, which will help minimize lighting impacts on biological species in the adjacent SJWA land.

All on-site lighting will also have to comply with the new night lighting guidelines in Section 9.08.100 of the City's Municipal Code, which limits off-site impacts to 0.25 foot-candles per square meter. As development occurs within the Specific Plan, adherence to these design guidelines and restrictions will help ensure that night lighting increases will not result in significant indirect lighting impacts on native wildlife within the SJWA.

For example, the Specific Plan requires that streetlights, parking lot lighting, and other project-related illumination sources be positioned, directed, and shielded to avoid "direct light spill" into MSHCP conservation areas including those contained within Existing Core H to the south of the WLC site, and Proposed Core 3 (Section 6.1.1, Proposed Core 3) to the east of the WLC site. Lighting installed according to the WLC Specific Plan will be consistent with MSHCP guidelines. The project will also have to comply with the City's new Dark Sky Lighting Ordinance, which reduces spillover light to 0.25 foot-candles at five feet from the adjacent property lines. However, due to the size of the WLC project and its proximity to the SJWA, additional mitigation may be necessary for cumulative lighting impacts on the SJWA.

In addition to night lighting issues associated with construction and operation, the proposed facilities are to include roof-mounted photovoltaic panels to provide electricity for the facilities and aid in the sustainability of the project and reduce additional GHG emissions. There is a potential for glare from these panels to confuse migratory birds into attempting to land in the area of the panels. However, the project design calls for the use of low glare and high solar transmission films to increase solar capacity and prevent unnecessary glare, so this impact would be less than significant.

Toxics Water Quality Development plans for the WLC project will include Water Quality Best Management Practices (BMPs) such as vegetated earthen channels, storm drain stenciling, street sweeping, and education. The BMPs recommended for the proposed WLC site are described in more detail in Section 4.9.6.1, *Construction-Related Water Quality Impacts,* and Section 4.9.6.2*, Operational Water Quality Impacts*. (Detention basins will be designed to filter potential toxics from storm water. Section 4.9.6.2, *Operational Water Quality Impacts*, also requires the regular removal of any contaminated materials from the detention basins to protect downstream water quality.) These BMPs

[1] *Ecological Consequences of Artificial Night Lighting.* C. Rich and T. Longcore (ed), 2006.

will be implemented as part of the storm water pollution prevention measures for the project, in accordance with all appropriate NPDES requirements.

Development of the WLC project will result in the additional use of hazardous materials in limited quantities associated with normal logistics use such as janitorial and cleaning products, solvents, herbicides, and insecticides. However, compliance with regulations, standards, and guidelines established by the Environmental Protection Agency (EPA), State, County, and local agencies relating to the storage, use, and disposal of hazardous waste will reduce the potential risk of hazardous materials exposure.

Development plans for the WLC project will include Water Quality BMPs such as vegetated earthen channels, storm drain stenciling, street sweeping, and education. Detention basins will be designed to filter potential toxics from storm water. These BMPs will be implemented as part of the storm water pollution prevention measures for the project, in accordance with all appropriate NPDES requirements.

Emissions Local wildlife (i.e., within the SJWA) may be exposed to vehicular exhaust and diesel particulates and toxic air contaminants from truck exhaust as the WLC project builds out. New development will produce significant amounts of diesel-related air pollutants that will be released into the atmosphere, including gases and particles of various sizes.

Most of the available (and most applicable) research is on diesel pollutant impacts on humans. Although the physiology of many animals is very different than humans, data on health effects from diesel pollution may nonetheless be somewhat instructive when attempting to assess diesel impacts on wildlife. Potential health effects on wildlife obviously depend on the species involved,[1] but in general health effects from air pollution/diesel exhaust include impaired cardiac and lung or respiratory function,[2] reduced heart function or longevity, decreased clutch size or hatching success, increased incidence of cancer and other mutagenic or teratogenic effects, ingestion of air deposited particulates, reduction in overall biodiversity, reproductive failure, etc. In general, impacts on higher animals are most commonly attributed to food loss and reproductive effects, rather than to direct toxic effects on adults. There are relatively few examples of higher animals suffering direct toxic effects from either atmospheric acidity or gaseous air pollution. However, a number of mammals are known to build up high levels of heavy metals and other pollutants in their systems from air pollution.[3]

A recent study of the health effects on rats from diesel particulates concludes that exposure to new technology diesel exhaust would not cause an increase in tumor formation or substantial toxic health effects in rats, although some biological effects might occur. The overall conclusion was that chronic exposure of rats to new technology diesel exhaust did not produce tumors in the lung; these observations are in marked contrast to the effects of chronic exposure to traditional technology diesel exhaust observed in multiple previous rat studies, in which lung tumors, as well as inflammation and the deposition of soot in the lung, were observed.[4]

Diesel emissions[5] contain thousands of pollutant species, and the composition depends on the fuel, vehicle, and driving conditions. The main public health concerns are from fine and ultrafine particulate matter, black or elemental carbon, polyaromatic hydrocarbons (PAHs) like phenanthrene, metallic ashes, gases like nitrogen dioxide, aldehydes like acetaldehyde, acrolein, and crotonaldehyde, volatile organic compounds like benzene and 1,3-butadiene, etc. One of the research limitations is that some health effects from these pollutants take a long time, in some cases even a lifetime, to exhibit themselves. These pollutant species can also be emitted from other sources, so in complex urban environments, it can be difficult to trace individual sources of air pollution. In this case, air quality is

1 "Air Pollution and Biodiversity: A Review." 1995.
2 "Cardiovascular and thermoregulatory responses of unrestrained rats exposed to filtered or unfiltered diesel exhaust." C. Gordon et al, Inhalation Toxicology, 2012.
3 Ibid.
4 "The Advanced Collaborative Emissions Study (ACES)." Health Effects Institute, 2015
5 "Diesel Emissions, Toxics, and Health Implications." M. Costantini, 2006.

relatively good and the only major activity is agriculture, so the increase in most of these pollutant species would predominantly be the result of new warehouse uses within the project. Research[1] suggests that wildlife may be more susceptible to air pollutant impacts than humans, due to their smaller size, higher respiration rates, smaller lung capacities, ingestion of local plant materials that have also been exposed, higher metabolic rates, etc., although some factors like shorter lifespans would reduce the length of exposure over time. For these reasons and for the purposes of this analysis, it is assumed that animals within the SJWA would be at least as susceptible to health effects from air pollution, including diesel exhaust, as humans.

In 2002, the EPA compiled a wide range of scientific studies on the health effects of diesel exhaust, including non-carcinogenic effects[2] of diesel exhaust on laboratory animals. Studies found that diesel particulate matter (diesel PM) had a limited effect on the survival and growth of rats and mice when exposed to diesel PM for short periods of time. However, rats, mice and hamsters all experienced increased lung to body-weight ratios when exposed to 1.5 mg/m^3 diesel PM concentrations for extended periods of time. Several studies looked at behavior effects in animals, and found that juvenile rats exposed to diesel emissions (DE) exhibited a decreased ability to move around on their own, and negatively affected their learning in adulthood.

Extended exposure to diesel emissions caused negative effects on the pulmonary functions of rats, hamsters, cats and monkeys. Depending on the species, DE levels of 1.5–11.7 mg/m^3 affected lung mechanical properties, diffusing capacity, lung volumes, and ventilator performance of the subject animal. The ability of rats to clear their airways was also severely impaired by diesel PM concentrations of 1 mg/m^3or greater. Data on the effect of diesel PM on airway clearance in other animals were limited, but the pathological effects of diesel PM seemed to be dependent on the relative rates of pulmonary deposition and clearance (rate of breathing) of the subject animal. The studies also showed that diesel PM can reduce an animal's resistance to respiratory infections. Diesel PM can begin to impair an animal's immune system in as little as 2–6 hours with exposures of 5–8 mg/m^3 of diesel PM. The testing data also suggested that diesel PM may be a factor in increased allergic reactions in animals.

When comparing filtered versus non-filtered DE, studies found that diesel particulates are the main cause of noncancerous health effects. However, they could not determine if diesel PM acts additively with the gas, or whether it combines with the gases to create different effects. The studies also found that other airborne contaminants (e.g., criteria pollutants) can be altered by diesel PM when absorbed by the diesel particles and increase the physical health effects caused by the diesel PM and other contaminants. These increased health risks were only found in laboratory settings. There was no evidence for DE interacting with other contaminants in normal urban atmospheric settings except for the impaired ability of animals to resist respiratory tract infections. No other noncancerous effects were found in any of the studies.

Chapter 7 of the EPA document includes studies that concluded diesel emissions also have carcinogenic effects on animals. Studies indicated that DE and/or diesel PM did result in increased cases of cancer in laboratory animals as well as humans. Rats experienced a trend of increased tumor growth when exposed to concentrations of DE exceeding 1×10^4 mg × hr/m^3. Because tumors were induced at high concentrations it is believed that they are caused by the lungs experiencing particle overload. The studies also examined the effect of filtered exhaust and discovered that it did not cause tumors. They concluded that filtered exhaust either was not a carcinogenic or had low cancer potency.

In addition to pollutants associated with diesel trucks, passenger vehicles produce additional air pollutants including carbon monoxide, nitrogen oxides, particulates,[3] etc. These pollutants will also have indirect impacts on wildlife resources of the SJWA. Two impacts of most concern would be ozone

1 "*Exhausted by Diesel."* NRDC 1998.
2 "*Health Assessment Document for Diesel Engine Exhaust."* United States EPA. March 2002.
3 "Pulmonary and cardiovascular of traffic-related particulate matter from roadside and diesel engine exhaust particles." M. Gerlofs-Nijland et al. Inhalation Toxicology, 2010.

degradation (e.g., plants having an unusual dry or "burned" look) and the deposition of additional nitrogen, both of which can disrupt plant growth cycles.

Direct air pollutant impacts on wildlife within the northern end of the SJWA will be reduced somewhat because prevailing winds are mainly to the southeast with the remainder mostly to the east (i.e., very little to the south), based on data from the project air quality study (MBA 2012). However, some diesel and other project-related air pollutants will still be expected to disperse toward the SJWA, including gases and particulates, from trucks and passenger vehicles, when prevailing winds are absent.

There appears to be little academic or scientific research on the specific impacts of diesel air pollutant emissions on wildlife (i.e., not laboratory animals) in natural settings, or specific setbacks for wildlife protection areas from warehouse distribution centers or other sources of diesel pollution. Most available research is too limited or specific regarding the type of pollutant and/or the species considered to be affected (e.g., impacts of one pollutant on one species). The portion of the SJWA adjacent to the WLC site property has been upland agricultural fields which may be used by foraging birds. The northern portion of the SJWA land is currently non-native grassland with predominantly non-native or invasive species.

Based on available scientific data, it is reasonable to conclude that the project, due to its size and expected amount of truck traffic, will have potentially significant impacts on wildlife within the SJWA and east across Gilman Springs Road from project air pollution, including diesel truck exhaust.

Research by the California Air Resources Board (CARB)[1] indicates that 80 percent of the particulates generally settle out of the atmosphere within 1,000 feet of emission sources. Therefore, diesel particulate deposition may occur within approximately 1,000 feet of truck activities within the project, which would extend part way into the northern portion of the SJWA.

Toxics, Health Risk Assessment. A Health Risk Assessment (HRA) (ESA 2018/MBA 2012) was completed for the project primarily prepared for human health risks associated with airborne hazards. An HRA is a guide that helps to determine if current or future exposure to a chemical or substance could affect the health of a population. The State of California Office of Environmental Health Hazard Assessment (OEHHA) develops methods for conducting health risk assessments. As defined under the Air Toxics "Hotspots" Information and Assessment Act of 1987 ["AB 2588" (Chapter 1252, Statutes of 1987), California Health and Safety Code Section 44306], "A health risk assessment means a detailed comprehensive analysis prepared pursuant to Section 44361 to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure" (Office of Environmental Health Hazard Assessment 1987).

The HRA of toxic air contaminants builds upon the assessment methodology described above but requires one additional step beyond that for *assessment* of the local pollutants. This step involves applying a risk characterization model to the results from the air dispersion model to estimate potential health risks at each sensitive receptor location.

Table 4 in the HRA (ESA 2018/MBA 2012) provides a discussion on the air pollutants that could potentially be present as a result of the construction and/or operation of the proposed facilities and the most relevant effects from pollutant exposure to humans. No standards for impacts to wildlife have been established. Since air is not stationary, there is a potential that air quality concerns associated with the project will not be confined to the WLC site itself and thus would disperse into "wildland" areas. The primary wind direction near the WLC site is to the southeast, as shown in the HRA (ESA 2018/MBA 2012). The wind direction would send any air hazards toward the Badlands MSHCP Criteria Cells and points to the east across Gilman Springs Road.

[1] *Air Quality and Land Use Handbook.* CARB and EPA. 2005.

Health risks within the context of this analysis are represented as the increase in cancer risk associated with exposure to diesel particulate matter emissions from project operations. These diesel particulate matter emissions arise from both exhaust and idling of diesel trucks while operating on and near the project site. The methodology applied in calculating cancer risk from diesel particulate matter has been published by the SCAQMD and the California OEHHA.

The Current OEHHA Guidance incorporates the importance of early-in-life sensitivities of young children to exposures to toxics air contaminants and recommends a lifetime exposure duration of 30-years. In this regard, cancer risk is expressed as the probability of an individual developing cancer due to exposure to diesel particulate matter emissions at the above-referenced durations from the project, out of a population of 1 million individuals. Thus, a receptor calculated to have a cancer risk of 1 in one million means that this receptor has a probability of 1 in 1 million of developing cancer from the continuous exposure to diesel particulate matter. The SCAQMD has established a significance threshold of 10 in 1 million for cancer risk attributable to exposure to a project's emissions. No such threshold exists for wildlife and a number of factors vary from the criteria established for human populations. The average life of migratory waterfowl ranges from 10 to 20 years. This might represent the most long-lived of the species in the vicinity of the project site. These species are also not present year round and may spend as little at 100 days in the WLC site on the SJWA. Based upon the available information, the effect of emissions on wildlife is less than significant.

Specific Plan Design Features. The Specific Plan requires a 250-foot development setback and an additional 150-foot building setback along the southern boundary of The WLC site and the SJWA. In addition, the Specific Plan calls for native landscaping in the setback area and a wall along the north side of the 250-foot setback zone. The separation between planned development along the east side of Gilman Springs Road will be set back from the roadway. This setback, plus the width of the roadway and related shoulder areas, will be sufficient to separate the project from the MSHCP criteria cell areas east of Gilman Springs Road, so no additional setback is needed in that area.

Mitigation Measures. The following measures are proposed to mitigate potential direct and indirect impacts to listed species due to the WLC site's proximity to the SJWA, even with the presence of the proposed approximately 400-foot setback along the WLC site boundary along the SJWA:

4.4.6.1A All Plot Plan applications within Planning Areas 10 and 12 (i.e. adjacent to the San Jacinto Wildlife Area as shown in Final EIR Volume 2 Figure 4.1.6B) shall provide a 250-foot setback from the southerly property line. Permitted uses within this setback area include landscaping, drainage and water quality facilities, fences and walls, utilities and utility structures, maintenance access drives, and similar related uses. No logistics buildings or truck access/parking/maneuvering facilities are permitted in this setback area.

In addition, logistics buildings within Planning Areas 10 and 12 may not be located within 400 feet of the southerly property line. All development proposals in Planning Areas 10 and 12 shall include a minimum six-foot tall chain link fence or similar barrier to separate warehouse activity from the setback area. This fence/barrier shall have metal mesh installed below and above ground level to prevent animals from moving between the development area and the setback area.

Within Planning Areas 10 and 12, all truck activity areas adjacent to the 250-foot buffer area along the southern property line shall be enclosed by minimum 11-foot tall solid walls to reduce noise and lighting impacts on the adjacent property. This measure shall be implemented to the satisfaction of the Planning Official.

A preliminary landscape plan for the 250-foot setback area shall be submitted with all Plot Plan applications for lots adjacent to the SJWA. Precise landscape plans shall be submitted with any grading permit for said lots and must be approved prior to the issuance of any building permit on said lots. The landscape plan shall be prepared by a licensed landscape architect in consultation with a qualified biologist and shall be consistent with the design standards contained in the World Logistics Center Specific Plan. No plant species listed in

Section 6.1.4 of the Western Riverside County Multiple Species Habitat Conservation Plan shall be installed within the setback area. Cottonwood trees shall be planted within the setback area consistent with the World Logistics Center Specific Plan. This measure shall be implemented to the satisfaction of the Land Development Division Manager.

4.4.6.1B Each Plot Plan application in Planning Areas 10 and 12 shall provide runoff management and water quality facilities adequate to minimize downstream erosion, maintain water quality standards and retain pre-development flows in a manner meeting the approval of the City of Moreno Valley and RWQCB requirements. All drainage improvements shall be designed to minimize runoff and erosional impacts on adjacent property. This measure shall be implemented to the satisfaction of the Land Development Division Manager of Public Works.

Based upon the previously described information, the 250-foot setback identified in **Mitigation Measure 4.4.6.1A**, will effectively mitigate potential indirect impacts of air pollutants, including diesel particulate matter, on wildlife within the SJWA. Compliance with the off-site lighting guidelines of the Specific Plan, compliance with the night lighting standards in Section 9.08.100 of the City Municipal Code, and implementation of Aesthetics **Mitigation Measure 4.1.6.4A** will help reduce lighting impacts on the SJWA to less than significant levels.

In addition, **Mitigation Measure 4.4.5.2A** will help assure that potential impacts to listed or sensitive plant species remain at less than significant levels.

Level of Impact After Mitigation. Compliance with the Specific Plan, Municipal Code, and implementation of the recommended **Mitigation Measures 4.4.6.1A** and **4.4.61B** will help reduce project impacts to listed species to less than significant levels.

4.4.6.2 Jurisdictional Delineation, Riparian Habitat or Other Sensitive Natural Communities

Impact 4.4.6.2: The project has the potential to result in significant impacts to jurisdictional land, riparian habitat and sensitive natural communities and may require subsequent permits from various resource agencies.

Threshold	Would the proposed project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Drainages in the WLC site were investigated and delineated by MBA in March 2012 and updated in 2013. A total of 15 primary drainage features were identified during this survey and a number of sub-drainages or tributaries were also identified. Jurisdiction for each drainage and/or sub-drainage or tributary was evaluated for jurisdiction under Section 404 and 401 of the CWA as administered by USACE and RWQCB, respectively; Porter Cologne as administered by the RWQCB; and Section 1600 of the Fish and Game Code as administered by the CDFW.

All 15 drainage features identified in the 2013 document were assessed to determine the jurisdictional limits. Based on current conditions, two of the 15 features are subject to the jurisdiction of the USACE and/or RWQCB. In addition, no jurisdictional wetlands or isolated wetlands were identified. Drainage Features 1, 2, 4, 12, and 13 flow to the south and then southwest of the WLC site. These drainage features are contained in roadside ditches or otherwise sheet flow prior to leaving the WLC site.

Drainage Feature 12 and 15 are likely subject to USACE jurisdiction. However, if any portion of Drainage Features 12 and 15 are affected by WLC project construction activities or flood control improvements in the future, then regulatory permitting may be required.

There are two drainage features that are completely isolated, Drainage Features 3 and 14. Drainage Feature 3 is an isolated temporary water quality facility serving the new Skechers building. This feature was created in an existing upland area and will eventually be converted into an underground storm drainage system. The second feature (consisting of two small basins) was created in an upland area to contain polluted runoff from a now-abandoned cattle operation. The eastern feature (Feature 14) is dominated by non-native tree species and contains no native riparian habitat. The western feature contains a mix of non-native trees and native riparian habitat. There is no evidence of ponding and the basin is no longer in use. These basins no longer serve any water quality function and are therefore not considered to be isolated waters of the State under the Porter Cologne Act.

The remaining seven features flow to the south and eventually revert to sheet flow conditions before reaching the San Jacinto Wildlife Area. Each drainage feature was walked until neither an ordinary high water mark (OHWM) nor a clearly defined bed and bank feature was present and the drainage course reverted to sheet flow onto open land. There was no evidence of flows downstream of the drainage where the OHWM was no longer present. Therefore, these features are hydrologically and physically isolated from any downstream RPW or TNW. Surface flows from the WLC site will eventually be conveyed into the SJWA. The SJWA's system of ponded areas was surveyed to document any downstream connectivity to any RPW or TNW. Based on current site conditions, the water within the SJWA is completely contained within the ponded area system with a large overflow area that conveys flows over a spillway in the southwest corner of the facility. There is no evidence of active flows within the spillway channel and all upstream flows are likely maintained within the SJWA exclusive of major flood events (50- to 100-year floods).

The MBA 2013 report concludes that two of the drainages on the project site are under the jurisdiction of the USACE (Drainages 12 and 15), and several additional drainages are under the jurisdiction of the CDFW and RWQCB (Drainages 7, 8, 9, 12, and 15).

Riparian or riverine areas are lands that contain habitat dominated by trees, shrubs, and persistent emergents, which occur close to or depend upon soil moisture from a nearby water source; or areas with fresh water flowing during all or a portion of the year. Unvegetated drainages (ephemeral streams) may be included if alterations to that drainage have the potential to affect Covered Species and Conservation Areas.

Drainage Feature 7, 8, 9, 12, and 15 within the WLC project are considered riparian/riverine areas, as defined by MSHCP. If impacts to any of these areas cannot be avoided, a DBESP report and relevant mitigation will be required by the RCA.

The WLC site does not contain habitat suitable for sensitive riparian species, such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. Additionally, no vernal pools or ephemeral ponds were observed on the WLC site and no suitable habitat for any fairy shrimp species was identified onsite.

Raptor Foraging Habitat. The WLC site and off-site facilities contain flat, open areas with sparse vegetation, which could be considered foraging habitat for some raptor species. Due to the regular, heavy disturbance associated with the various agricultural activities in the WLC site and off-site facilities resulting in a rather limited prey base, and the limited size of the site in relation to the expansive foraging habitat in the near vicinity including the SJWA, LPSRA and the extensive Badlands to the east, the foraging habitat on site is considered marginally suitable and an adverse but not significant impact to raptor foraging habitat is anticipated. No mitigation is necessary or proposed.

Project or Specific Plan Design Features. The WLC site does not contain any design features related to riparian habitat or other sensitive natural communities.

Mitigation Measures. The JD prepared for the project in 2013 is programmatic in nature because no specific development activity or building plans are proposed at this time. The 2012 JD determined the on-site drainages were not under the jurisdiction of the USACE, but one or more may be under the jurisdiction of the CDFW. Therefore, **Mitigation Measure 4.4.6.2A** will help ensure there will be no significant impacts to riparian areas associated with Waters of the U.S. or Waters of the State as a result of future development within the project.

In addition to the previously identified **Mitigation Measures 4.4.6.1A** through **4.4.6.1C**, the following measures have been identified to reduce the significance of potential impacts to riparian/riverine habitat:

4.4.6.2A Prior to the issuance of grading permits the applicant shall secure a jurisdictional determination from the United States Army Corps of Engineers (USACE) and confirm with the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) if drainage features mapped on the property to be developed are subject to jurisdictional authority. If the features are subject to regulatory protection, the applicant shall secure permit approvals with the appropriate agencies prior to initiation of construction. Compensatory riparian habitat mitigation shall be provided at a minimum ratio of 1:1 (replacement riparian habitat to impacted riparian habitat) to ensure no net loss of riparian habitat or aquatic resources. It should be noted that this is a minimum recommended ratio but the actual permitting ratio may be higher. These detention basins shall be oversized to accommodate the provision of areas of riparian habitat. Maintenance of the basins shall be limited to that necessary to ensure their drainage and water quality functions while encouraging habitat growth. Riparian habitat mitigation shall be provided concurrent to or prior to impacts. A Compensatory Mitigation Plan shall be prepared for all unavoidable impacts and shall be consistent with the United States Army Corps of Engineers (USACE)/United States Environmental Protection Agency's Compensatory Mitigation for Losses of Aquatic Resources; Final Rule and the United States Army Corps of Engineers Standard Operating Procedure for Determination of Mitigation Ratios.

The applicant shall consult with United States Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board to establish the need for permits based on the results of a recent jurisdictional delineation and final design plans for each of the proposed the facilities. Consultation with the three agencies shall take place and appropriate permits obtained for project-level development. Compensation for losses associated with the altering of drainages on site shall be in agreement with the permit conditions and in coordination with compensation outlined below.

Mitigation shall consist of onsite creation, offsite creation, or purchase of mitigation credits from an approved mitigation bank. As outlined in the WLC programmatic DBESP report, onsite riparian habitat shall be created at a minimum 1:1 ratio due to the poor quality of onsite habitat. New habitat shall be created within the onsite detention/infiltration basins to the extent allowed by the resource agencies to reduce storm flows, improve water quality, and reduce sediment transport. Habitat creation shall include the installation of mule fat scrub or similar riparian scrub habitat to promote higher quality riparian habitat, but still maintain the basins for their primary role as detention facilities. The use of these areas as conservation areas would require consent from CDFW and the City of Moreno Valley (MM BIO-2b and MM DBESP 1 through 3).

4.4.6.2B As required by the Resource Conservation Agency (RCA), a program-level Determination of a Biological Equivalent or Superior Preservation (DBESP) for impacts to Riverine/Riparian habitat has been prepared and shall be approved by the Resource Conservation Agency prior to project grading permit approval. The Determination of a Biological Equivalent or Superior Preservation includes a general discussion of mitigation options for impacts to riverine/riparian areas as well as general location and size of the mitigation area and includes a monitoring program.

If impacts to riparian habitat within the WLC site cannot be avoided at the time of specific development, then a separate project-level Determination of Biologically Equivalent or Superior Preservation (DBESP) shall be prepared to identify project-specific impacts to riparian habitat and incorporate mitigation options identified in Mitigation Measure 4.4.6.2A.

A project-level Determination of a Biological Equivalent or Superior Preservation for each specific development shall be prepared to document measures to reduce impacts to riparian/riverine habitats in accordance with the Western Riverside County Multiple species Habitat Conservation Plan (MSHCP). The project-level Determination of a Biological Equivalent or Superior Preservation shall include specific measures to reduce impacts to riparian areas and provide mitigation in the form of onsite preservation of riparian areas and/or a combination of compensation through purchase and placement of lands with riparian/riverine habitat into permanent conservation through a conservation easement and/or restoration or enhancement efforts at offsite or onsite locations. Mitigation required for compensation for impacts to riparian/ riverine areas shall require a minimum of 1:1 mitigation ratio of riparian/riverine mitigation land.

As outlined in the WLC programmatic DBESP, erosion control improvements shall be installed within Drainage 9 to reduce sediment transport, and additional riparian habitat shall be enhanced within this drainage following the installation of the erosion control improvements (MM DBESP 4 and 5).

4.4.6.2C Prior to issuance of any grading permit for any offsite improvements that support development within the WLC site, the developer shall retain a qualified biologist to prepare a jurisdictional delineation (JD) for any drainage channels affected by construction of the offsite improvements. This jurisdictional delineation shall be submitted to the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) for review and concurrence. If the offsite improvements will not affect any identified jurisdictional areas, no United States Army Corps of Engineers permitting is required. However, permitting through the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (i.e., Streambed Alternation Agreement) may still be required for these improvements. The applicant shall consult with United States Army Corps of Engineers, California Department of Fish and Wildlife and Regional Water Quality Control Board to establish the need for permits based on the results of the 2013 jurisdictional delineation and final design plans for each of the proposed the facilities. Consultation with the three agencies shall take place and appropriate permits obtained. Compensation for losses associated with any altered offsite drainages shall be in agreement with the permit conditions with a minimum1:1 mitigation ratio. Any landscaping associated with these offsite improvements shall use only native species to help protect biological resources residing within or traveling through these drainages per Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Table 6.1.2. This measure shall be implemented to the satisfaction of the City Planning Division in consultation with the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and the California Department of Fish and Wildlife.

Level of Significance after Mitigation. With implementation of **Mitigation Measures 4.4.6.1A, 4.4.6.1B, and 4.4.6.2A** through **4.4.6.2C**, potential impacts to riparian habitat or other sensitive natural communities, including on-site drainages, will be reduced to less than significant levels.

4.4.6.3 Candidate, Non-listed Sensitive, or Special-Status Species

Impact 4.4.6.3: *The project has the potential to affect the burrowing owl, designated "species of special concern" by the California Department of Fish and Wildlife.*

Threshold	Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Critical Habitat. No USFWS designated Critical Habitat for any species is located within the WLC site; therefore, no further action with regard to Critical Habitat is necessary.

Los Angeles Pocket Mouse. Focused surveys for the LAPM were conducted in August 2005, June 2010, June 2012, July 2013, and May 2018. Suitable habitat was found within Drainage Feature 9, one of the main drainage features located in the eastern end of the WLC site. In its MSHCP Consistency Report, MBA concluded that LAPM is absent from the WLC site, which is substantiated by the ESA May 2018 surveys. However, the WLC Specific Plan indicates this drainage will remain in its present natural condition, except for the southern end as it becomes the Street H channel and outlets to the SJWA land to the south. Extensive surveys were completed in 2005, 2010, 2012, 2013, and 2018, which concluded that Los Angeles pocket mouse was not present. In addition, there is no suitable habitat between the known occurrence of Los Angeles pocket mouse and the WLC SITE. The known populations of Los Angeles pocket mouse are located within the southern portion of the SJWA, which is more than 2 miles from the southern WLC site boundary. The area between the known recorded occurrences of Los Angeles pocket mouse and the WLC site have been actively disked farmland in the past and a 500-foot wide area along the southern WLC site boundary continues to be actively disked. Therefore, there is no habitat connectivity between the known occurrences of Los Angeles pocket mouse and the WLC site. However, to ensure that no impacts occur**, Mitigation Measure 4.4.6.3E** has been added below.

Migratory or Nesting Birds. The 2013 MBA report found the extensive agriculture plant communities in the WLC site and offsite facilities provide suitable nesting habitat for ground-nesting avian species such as western meadowlark (*Sturnella neglecta*) and burrowing owl. Suitable habitat for shrub and tree nesting species such as red-tailed hawk, black phoebe (*Sayornis nigricans*), and house finch occur along the edges of existing development surrounding the WLC site and offsite facilities as well as isolated, remnant patches of vegetation in undisturbed portions of the WLC site and off-site facilities. Therefore, portions of the WLC site and offsite facilities and immediately adjacent to the WLC site and off-site facilities provide suitable nesting habitat for migratory birds protected under the MBTA and California Fish and Game Code.

The WLC site contains suitable nesting habitat for several tree-, shrub-, and ground-nesting avian species. Therefore, MBA recommends construction activities avoid the avian nesting season, from February to August, if possible. If construction activity must take place during the nesting season, a pre-construction nesting bird survey should be conducted prior to any ground disturbance activities. The survey can be conducted in conjunction with the pre-construction survey for burrowing owl.

If passerine birds are found to be nesting or if there is evidence of nesting behavior within 250 feet of the impact area, a 250-foot setback will be required around the nest where no vegetation disturbance will be permitted. For raptor species such as hawks and owls, this buffer should be expanded to 500 feet. A qualified biologist will be required to closely monitor nests until it is determined that they are no longer active, at which time construction activity in the vicinity of nests could continue. Construction activity may proceed within the buffer area at the discretion of the biological monitor.

Burrowing Owl. For those species that are not covered by the take and incidental take provisions of the MSHCP (e.g., burrowing owl), the MSHCP requirements dictate that further protective action be taken. While no burrowing owls were identified within the project's proposed area of disturbance, because suitable habitat is present within the WLC site for the burrowing owl and because the species is highly mobile, a potential exists that, at some future date prior to project development, this species may occupy the development sites. The species was documented in 2018 within the proposed 250-foot setback area along the southern WLC site boundary. This is a potentially significant impact requiring mitigation.

All burrowing owl observations within the project site prior to 2018 are associated with artificially created berms. The recorded sightings have been within a bank of an existing drainage feature, a berm within the recently constructed detention basin associated with the Skechers Building (Drainage 3), and a

roadside berm just south of Alessandro Boulevard. Burrowing owl was observed in 2018 in the eastern drainage within the proposed 250-foot setback area.

The proposed detention basins will be constructed with similar manufactured berms. Based on historic observations of burrowing owl within the WLC site, it is reasonable to assume that construction of similar berms will continue to provide optimum burrow habitat for resident burrowing owls.

In addition, since there have been no recorded occurrences of burrowing owl in the northern portion of the SJWA there is no concern for competition with other burrowing owls. It is reasonable to assume that the created detention basins will provide more than a sufficient amount of foraging habitat to support a single pair of burrowing owl. Since the southern 250-feet of the WLC site will not contain any building development and construction activities will be restricted to detention basins and associated access roads, it would be more appropriate to include the setback area in a deed restriction rather than a conservation easement.

Plant Survey Areas. The project limits are within MSHCP Survey Area 10 of the NEPSSA and MSHCP Survey Area 9 of the CASSA for plant species. The MSHCP requires that a habitat site assessment (HSA) be conducted for all proposed developments within Narrow Endemic Plant Species' (NEPSSAs) and Criteria Area Sensitive Plant Species' (CASSAs). The HSA for most NEPSSA and CASSA plants must be done during a normal rainfall year and/rainy season. If it is determined during the HSA that suitable soils and/or growing conditions are present on site to support identified NEPSSA species, a focused plant survey is required during the plant species blooming period.

Habitat suitability of the site for NEPSSA and CASSA species is detailed in the General Biological Resources and MSHCP Compliance Report (Appendix E). None of the species analyzed in the NEPSSA or CASSAs is anticipated to occur on the WLC site and none were observed during 2018 rare plant surveys. The implementation of the WLC project would not affect the habitat or result in a direct impact for any special status plant species.

WLC or Specific Plan Design Features. The WLC Specific Plan does not contain any design features relative to sensitive species or birds, other than the landscape palette that contains all native and/or drought-tolerant plants that may be utilized by birds tolerant of human activity.

Mitigation Measures. The following measures have been identified to reduce the significance of potential impacts to special status bird species:

Listed or Sensitive Species:

The previously identified **Mitigation Measures 4.4.6.1A** through **4.4.6.1B** will reduce potential impacts on listed or otherwise sensitive plant or animal species or critical habitat to less than significant levels, other than the following which are addressed with additional measures:

Migratory/Nesting Birds

4.4.6.3A Pursuant to the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC), site preparation activities (removal of trees and vegetation) shall be avoided during the nesting season of potentially occurring native and migratory bird species (generally February 1 to August 31). If site preparation activities must occur during the nesting season, a pre-activity field survey shall be conducted by a qualified biologist prior to issuance of grading permits for such development. The survey shall determine if active nests of species protected by the Migratory Bird Treaty Act or California Fish and Game Code are present in the construction zone. If active nests of these species are found, the applicant shall establish an appropriate buffer zone with no grading or heavy equipment activity within of 500 feet from an active listed species or raptor nest, 300 feet from other sensitive or protected bird nests (non-listed), 250 feet from passerine birds, or 100 feet for

sensitive or protected songbird nests. All construction activity within the vicinity of active nests must be conducted in the presence of a qualified biological monitor. Construction activity may encroach into the setback area at the discretion of the biological monitor in consultation with CDFW. In the event no special status avian species are identified within the limits of disturbance, no further mitigation is required. In the event such species are identified within the limits of ground disturbance, mitigation measure 4.4.6.3B shall also apply. This measure shall be implemented to the satisfaction of the City Planning Division.

4.4.6.3B If it is determined that project-related grading or construction will affect nesting migratory bird species, no grading or heavy equipment activity shall take place within the limits established in Mitigation Measure 4.4.6.3A until it has been determined by a qualified biologist that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow. This measure shall be implemented to the satisfaction of the City Planning Division.

4.4.6.3C The loss of foraging habitat for golden eagle and white-tailed kite will be mitigated by payment of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) fee and the creation of a landscaped setback area adjacent to the SJWA property. First, the payment of the Western Riverside County Multiple Species Habitat Conservation Plan fee shall be required on a project-by-project basis. Second, a 250-foot setback as described in Mitigation Measure 4.4.6.1A shall be established within the WLC site. This area will reduce impacts to raptor species foraging in the adjacent San Jacinto Wildlife Area open space areas.

Burrowing Owl

4.4.6.3D A pre-construction clearance survey for burrowing owl shall be conducted by a qualified biologist no more than thirty (30) days prior to any grading or ground disturbing activities within the WLC site.

In the event no burrowing owls are observed within the limits of ground disturbance, no further mitigation is required.

If construction is to be initiated during the breeding season (February 1 through August 31) and burrowing owl is determined to occupy any portion of the disturbance area during the 30-day pre-construction survey, construction activity shall maintain a 500-foot buffer area around any active nest/burrow until it has been determined that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow. If this avoidance buffer cannot be maintained, consultation with the California Department of Fish and Wildlife (CDFW) shall take place and an appropriate avoidance distance established. No disturbance to active burrows shall occur without appropriate permitting through the Migratory Bird Treaty Act and/or California Department of Fish and Wildlife.

If active burrowing owl burrows are detected outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the California Department of Fish and Wildlife. A relocation plan may be required by California Department of Fish and Wildlife if active and/or passive relocation is necessary. The relocation plan shall outline the basic process and provides options for avoidance. Construction activity may occur within 500 feet of the burrows at the discretion of the biological monitor in consultation with CDFW.

A relocation plan may be required by California Department of Fish and Wildlife if active or passive relocation is necessary. Artificial burrows may be constructed within appropriate burrowing owl habitat within the proposed open space/conservation area (Planning Area 30), a 74.3-acre area in the southwest portion of the Specific Plan. This area abuts the Lake Perris State Recreation Area (LPSRA) which is already in conservation. If suitable habitat is not present in Planning Area 30, owls may be relocated to the SJWA, the 250-foot setback area or other suitable on-site or off-site areas. Construction activity may occur within 500 feet of the burrows at the discretion of the biological monitor.

Los Angeles Pocket Mouse

4.4.6.3E Prior to the approval of any Plot Plans proposing the development of land including or adjacent to Drainage 9, a protocol survey for the Los Angeles Pocket Mouse (LAPM), including 100 feet upstream and downstream of the affected reach shall be prepared by a qualified biologist and submitted to the City. If the affected drainage is not occupied, the area is considered not to be occupied and development can continue without further action. If the species is found within the specific survey area, no development shall occur until an appropriate mitigation fee is paid or appropriate amount of land set aside on the WLC site or off site to compensate for any loss of occupied Los Angeles Pocket Mouse habitat. Alternatively, individuals may be relocated to the 250-foot setback zone along the southern boundary of the property identified in Mitigation Measure 4.4.6.1A, or other appropriate areas as determined by the United States Fish and Wildlife Service. If necessary, this measure shall also be coordinated with Mitigation Measure 4.4.6.2B regarding preparation and processing of a Determination of a Biological Equivalent or Superior Preservation report. This measure shall be implemented to the satisfaction of the City Planning Division.

Resource Management

4.4.6.3F Prior to approval of any discretionary permits for development within Planning Areas 10 and 12, a Biological Resource Management Plan (BRMP) shall be prepared to prescribe how the 250-foot setback area outlined in Mitigation Measure 4.4.6.1A will be developed and maintained This plan shall identify frequent and infrequent vegetation management requirements (i.e., removal of invasive plants) and the planting and maintaining trees to provide roosting and nesting opportunities for raptors and other birds. The Biological Resource Management Plan shall also describe how relocation of listed or sensitive species will occur from other locations as outlined in Mitigation Measures 4.4.5.2A, 4.4.6.3D, and 4.4.6.3E.

The Biological Resource Management Plan shall be reviewed and approved by the Planning Official in consultation with the San Jacinto Wildlife Area Manager. The Biological Resource Management Plan shall cover all the land within the 250-foot setback zone within Planning Areas 10 and 12 Implementation of the plan shall be supervised by a qualified biologist, to the satisfaction of the City Planning Division.

4.4.6.3G Mitigation Measure 4.4.6.1A specifies that a landscape plan shall be submitted with any development proposal for lots adjacent to the San Jacinto Wildlife Area (SJWA) property prior to issuance of a precise grading permit. The landscape plan shall be prepared by a licensed landscape architect in consultation with a qualified biologist and shall be consistent with the design standards contained in the Specific Plan. No plant species listed in Section 6.1.4 or Table 6.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) shall be installed within the setback area. In conjunction with development adjacent to the San Jacinto Wildlife Area (SJWA), cottonwood trees shall be planted within the 250-foot setback area, consistent with the World Logistics Center Specific Plan plant palette (per DBESP MM 8).

During construction, the runoff leaving construction areas shall be directed to onsite detention basins and away from downstream drainage features located offsite. All projects within the WLC site shall be required to prepare a Storm Water Pollution Prevention Plan (as outlined in MM 4.9.6.2B). Regarding the 250-foot setback area, pedestrian and vehicular access to areas of riparian/riverine habitat shall be prohibited except for controlled maintenance access. Finally, no grading shall be permitted within conserved riparian/riverine habitat areas except for grading necessary to established or enhance habitat areas (DBESP MM 6, 7, 9, and 10).

4.4.6.3H As outlined in Mitigation Measure 4.4.6.1A, development adjacent to the 250-foot open space setback shall have a six-foot chain link fence or similar barrier to help separate human activity and the setback area. Any chain link fencing installed on any properties

adjacent to the 250-foot buffer area shall have metal mesh installed below and above ground level to prevent animals from accessing new development areas.

4.4.6.3I The individual property owner and/or Property Owners Association (POA) as appropriate shall be responsible for maintaining the various onsite landscaped areas, open improved or natural drainage channels, and detention or flood control basins in a manner that provide for fuel management and vector control pursuant to standards maintained by the City Fire Marshall and County Department of Environmental Health- Vector Control Group. This measure requires the individual owner or Property Owners Association (POA) to manage vegetation in and around these areas or improvements so as to not represent a fire hazard as defined by the City Fire Department through the substantial buildup of combustible materials. This measure also requires the individual owner or Property Owners Association to manage vegetation and standing water in drainage channels and basins such that they do not encourage or allow vectors to occur (primarily rats and mosquitoes). Runoff shall not be allowed to stand in channels or basins for more than 72 hours without treatment or maintenance to prevent establishment of mosquitoes per published County vector control guidelines and "Best Management Practices for Mosquito Control on California State Properties" which is available from the California West Nile Virus website at http://www.westnile.ca.gov/resources. This measure shall be implemented by the Property Owners Association in consultation with the City Fire Department and Riverside County Department of Environmental Health – Vector Control Group.

4.4.6.3J A Fuel Management Plan shall be prepared on a project-by-project basis for those Planning Areas adjacent to the south and east boundary of the WLC site adjacent to Western Riverside County Multiple Species Habitat Conservation Plan Conservation Areas. The Fuel Management Plan shall be prepared by the project applicant and submitted for approval to the prior to plot plan approval for those projects on the southern and eastern Western Riverside County Multiple Species Habitat Conservation Plan boundary. Per the Western Riverside County Multiple Species Habitat Conservation Plan guidelines, the Fuel Management Plan shall include the following:

- A plant palette of adequate plant species that may be planted within the Fuel Management Area, which will be approved by a biologist familiar with the plant requirements of the area.
- A list of non-native invasive plants that are prohibited from installation.
- Maintenance activities and a maintenance schedule.

Fuel modification zones shall be mapped and include an impact assessment as required under California Environmental Quality Act guidelines for a project-level analysis. The plan shall demonstrate that the adjacent Western Riverside County Multiple Species Habitat Conservation Plan Areas are adequately protected from expected fire risks.

4.4.6.3K Prior to approval of any plot plans for development adjacent to the SJWA, the applicant shall demonstrate that direct light rays have been contained within the development area, per requirements of the MSHCP Section 6.0 which states, "Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting." This measure shall be implemented to the satisfaction of the City Planning Division.

Level of Significance after Mitigation. Implementation of the above-listed mitigation measures would reduce impacts to burrowing owl, migratory bird species, and Los Angeles pocket mouse to less than significant levels.

Note to reader: Cumulative Impacts to Biological Resources are discussed in Section 6.4 Biological Resources.

NOTE TO READERS: The cumulative portion of Section 4.5 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.5 of this Revised Sections of the FEIR. All other portions of Section 4.5 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.5 means that the corresponding portion of Section 4.5 in the FEIR remains unchanged or has been deleted.

4.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

NOTE TO READERS: The cumulative portion of Section 4.6 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.6 of this Revised Sections of the FEIR. All other portions of Section 4.6 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.6 means that the corresponding portion of Section 4.6 in the FEIR remains unchanged or has been deleted.

4.6 GEOLOGY AND SOILS

NOTE TO READERS: This portion of the Revised Sections of the FEIR replaces portions of Section 4.7 of the FEIR. The cumulative portion of Section 4.7 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.7 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.7 means that the corresponding portion of Section 4.7 in the FEIR remains unchanged or has been deleted.

4.7 GREENHOUSE GAS EMISSIONS, CLIMATE CHANGE, AND SUSTAINABILITY

Although not required by the Judge's ruling, portions of the Traffic and Circulation analysis have been revised to: (1) Show the effect of using the trip generation rates shown in the most recent edition of the Institute of Transportation Engineer's Trip Generation Manual. (2) Show the effect of the inclusion of the over 300 projects that cumulatively contribute to traffic impacts. As a result, Section 4.7 Greenhouse Gas Emissions, Climate Change, and Sustainability, Section 6.7 Greenhouse Gas Emissions, Climate Change, and Sustainability Cumulative, along with Appendix A, Air Quality, Greenhouse Gas, and Health Risk Assessment Report, have also been revised to show the effect of incorporating the applicable data from the revised traffic analysis.

This section provides a discussion of global climate change, existing regulations pertaining to global climate change, and an analysis of greenhouse gas (GHG) emissions associated with the World Logistics Center project. This analysis examines the short-term construction and long-term operational impacts and evaluates the effectiveness of measures incorporated as part of the project design.

This section analyzes the World Logistics Center project's potential climate impacts based on the following technical studies:

Air Quality, Greenhouse Gas, and Health Risk Assessment Report World Logistics Center Specific Plan (ESA, 2018) contained in Appendix A of this Revised Sections of the FEIR.

World Logistics Center (WLC) Transportation Energy Technical Study, May 2018, Environmental Science Associates.

World Logistics Center (WLC) Comparison of Renewable Energy Technologies report, May 2018, WSP.

4.7.1 Existing Setting

4.7.1.1 Global Climate Change

Global climate change is the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred by some scientists and policy makers to "global warming" because it helps convey the notion that there are other changes in addition to rising temperatures.

Climate change refers to any significant change in measures of climate such as temperature, precipitation, or wind, lasting for decades or longer (U.S. Environmental Protection Agency [EPA], 2007). Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation); and/or

- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, and desertification).

The primary observed effect of global climate change has been a rise in the average global tropospheric[1] temperature of 0.36 degrees Fahrenheit (°F) per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming could occur, which would induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of California could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold and increased intensity of tropical cyclones (hurricanes). Specific effects in California might include a decline in the Sierra Nevada snowpack, erosion of California's coastline, and seawater intrusion in the Delta.

Human activities, such as fossil fuel combustion and land use changes release carbon dioxide (CO_2) and other compounds, cumulatively termed greenhouse gases (GHGs). GHGs are effective in trapping infrared radiation that otherwise would have escaped the atmosphere, thereby warming the atmosphere, the oceans, and earth's surface (USEPA, 2007). Many scientists believe that "most of the warming observed over the last 50 years is attributable to human activities" (Intergovernmental Panel on Climate Change [IPCC], 2007d). The increased amounts of CO_2 and other GHGs are alleged to be the primary causes of the human-induced component of warming.

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include CO_2, methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). In the last 200 years, substantial quantities of GHGs have been released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, enhancing the natural greenhouse effect, which is believed to be causing global climate change. While human-made GHGs include CO_2, CH_4, and N_2O, some (like chlorofluorocarbons [CFCs]) are completely new to the atmosphere.

GHGs vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one-unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of metric tons of "CO_2 equivalents" (mt CO_2e or MTCO_2e).

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Human-made sources include the mining and burning of fossil fuels; digestive processes in ruminant animals such as cattle; rice paddies; and the burying of waste in landfills. As for CO_2, the major removal process of atmospheric CH_4—chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH_4 concentrations in the atmosphere are increasing.

Worldwide emissions of GHGs in 2010 were approximately 47,351 million mt CO_2e (World Resources Institute [WRI], 2018). Emissions from the top five countries and the European Union accounted for approximately 57 percent of the total global GHG emissions, according to the most recently available data. The United States was the number two producer of GHG emissions, contributing 13 percent of the emissions. The primary GHG emitted by human activities in the United States was CO_2, representing approximately 82 percent of total GHG emissions. CO_2 from fossil fuel combustion, the

[1] The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

largest source of GHG emissions, accounted for approximately 85 percent of the GHG emissions (WRI, 2018).

In 2016, the United States emitted approximately 5.3 billion mt CO_2e or approximately 16.5 tons per year (tpy) per person. Of the six major sectors nationwide (electric power industry, transportation, industry, agriculture, commercial, and residential), the electric power industry and transportation sectors combined account for approximately 72 percent of the GHG emissions; the majority of the electrical power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Between 1990 and 2016, total United States GHG emissions rose approximately 2.8 percent (USEPA, 2018b).

World carbon dioxide emissions are expected to increase by 1.9 percent annually between 2001 and 2025 (USEIA, 2017). Much of the increase in these emissions is expected to occur in the developing world where emerging economies, such as China and India, fuel economic development with fossil energy. Developing countries' emissions are expected to grow above the world average at 2.7 percent annually between 2001 and 2025; and surpass emissions of industrialized countries near 2018.

The California Air Resources Board (CARB) is responsible for developing the California Greenhouse Gas Emission Inventory. This inventory estimates the amount of GHGs emitted into and removed from the atmosphere by human activities within the State of California and supports the Assembly Bill (AB) 32 Climate Change Program. The most recent inventory of GHG emissions in California estimated 440.4 million mt CO_2e in 2015 (CARB, 2017d). This is a 2.2 percent increase in GHG emissions from 1990. The top contributor of emissions in 2015 was transportation, which contributed 37 percent of the emissions. The second highest sector was industrial (21 percent), which includes sources from refineries, general fuel use, oil and gas extraction, and cement plants. According to CARB, California is on track to meet the 2020 GHG reduction target codified in California Health and Safety Code (HSC), Division 25.5, also known as The Global Warming Solutions Act of 2006 (AB 32) (CARB, 2016a).

4.7.1.2 Effects of Global Climate Change

Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use these data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The International Panel on Climate Change (IPCC) constructed several emission trajectories of greenhouse gases needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean surface temperature change for 2081-2100 relative to the period from 1986 to 2005, given six scenarios, could range from 0.3 degrees Celsius (°C) to 4.8 °C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios (IPCC, 2007c). The IPCC concluded that global climate change was largely the result of human activity, mainly the burning of fossil fuels. However, the scientific literature is not consistent regarding many of the aspects of global warming or climate change, including actual temperature changes during the 20th century, the accuracy of the IPCC report, and contributions of human versus non-human activities.

Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and degradation of air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and

hurricanes can displace people and agriculture. Global warming may also contribute to air quality problems from increased frequency of smog and particulate air pollution.

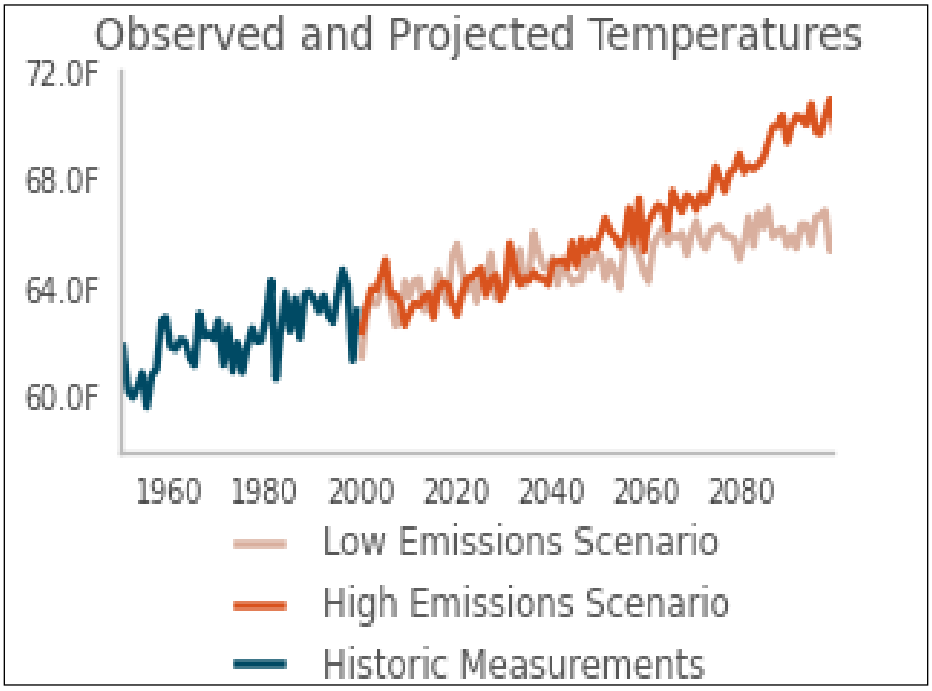
Additionally, the following climate change effects, which are based on trends established by the IPCC, can be expected in California over the course of the next century:

- A diminishing Sierra snowpack declining by 70 percent to 90 percent, threatening the State's water supply. If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier.
- A rise in sea levels resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. (Note: This condition would not affect the project area as it is a significant distance away from coastal areas.)
- An increase in temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- Increased risk of large wildfires if rain increases as temperatures rise. Precipitation, winds, temperature, and vegetation influence wildfire risk; therefore, wildfire risk is not uniform throughout the state. Changes in current precipitation patterns could influence that risk. As an example, wildfires in the grasslands and chaparral ecosystems of *southern* California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant fuel available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more *northern* California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Increasing temperatures from 8 to 10.4°F under the higher emission scenarios, leading to a 25 percent to 35 percent increase in the number of days ozone pollution levels are exceeded in most urban areas (see below).
- Increased vulnerability of forests due to forest fires, pest infestation, and increased temperatures.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.
- Increased electricity demand, particularly in the hot summer months.
- Increased ground-level ozone formation due to higher reaction rates of ozone precursors.

Consequences of Climate Change in Moreno Valley. The figure below displays a chart of measured historical and projected annual average temperatures in the Moreno Valley area. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios.

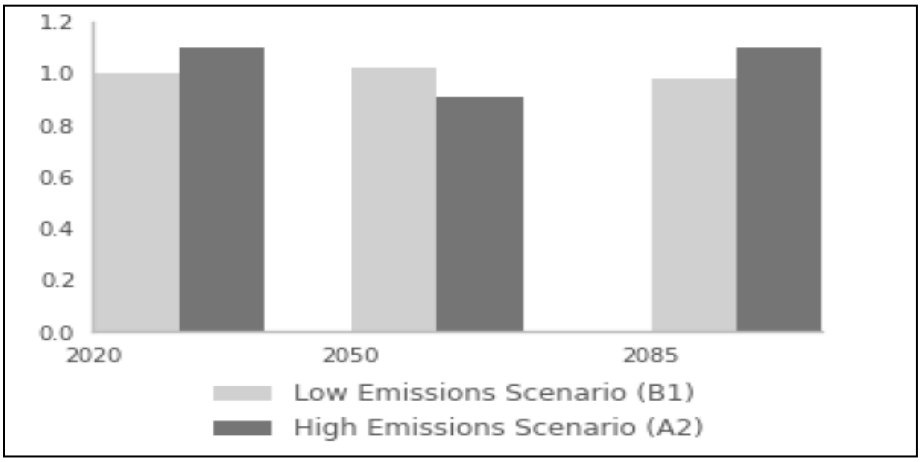
Water for the project would be provided by the Eastern Municipal Water Department (EMWD). The EMWD 2015 Urban Water Management Plan considered the impact of climate change on water supplies as part of its long-term strategic planning. One of the outcomes of climate change could be

more frequent limitations on imported supplies. To limit the impact of climate change, EMWD's long-term planning focuses on the development of reliable local resources and the implementation of water use efficiency. This includes the full utilization of recycled water and the recharge of local groundwater basins to increase supply reliability during periods of water shortage. EMWD is also focused on reducing demand for water supplies, especially outdoors. Increasing the use of local resource and reducing the need for imported water has the dual benefit of not only improving water quality reliability, but reducing the energy required to import water to EMWD's service area.



The figure below displays the fire risk in Moreno Valley relative to 2010 levels. The figure displays the projected increase in potential area burned given three different 30-year averaging periods ending in 2020, 2050, and 2085 and two different scenarios (A2, B1). The data are modeled solely on climate projections and do not take landscape and fuel sources into account (there is very little combustible material in the project area). The data modeled the ratio of additional fire risk for an area as compared to the expected burned area. The data are shown in the figure below and indicate that under the low-emissions scenario, the additional wildfire risk is about 1, which means that wildfire risk is expected to remain about the same. Under the high-emission scenario, additional risk is variable with a slight increase.

Wildfire Risk in Moreno Valley



4.7.2 Regulatory Setting

4.7.2.1 Federal Regulations/Standards

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's Highway Traffic and Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The vehicles had to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards were designed to cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle (EPA 2012).

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses (also known as "Phase 1"). For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model year (12% and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles (includes other vehicles like buses, refuse trucks, concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the agencies are proposing engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year. Building on the success of the standards, the EPA and U.S. Department of Transportation jointly finalized additional standards (called "Phase 2") for medium- and heavy-duty vehicles through

model year 2027 that will improve fuel efficiency and cut carbon pollution. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons.

4.7.2.2 State Regulations/Standards

California Code of Regulations Title 24, Part 6. The California Energy Code (Title 24, Section 6) was created as part of the California Building Standards Code (Title 24 of the California Code of Regulations) by the California Building Standards Commission in 1978 to establish statewide building energy efficiency standards to reduce California's energy consumption. These standards include provisions applicable to all buildings, residential and nonresidential, which describe requirements for documentation and certificates that the building meets the standards. These provisions include mandatory requirements for efficiency and design of energy systems, including space conditioning (cooling and heating), water heating, and indoor and outdoor lighting systems and equipment, and appliances. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle as technology and methods have evolved. The 2016 Standards, effective January 1, 2017, focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations. The next code update (2019) is expected to focus on integrating solar photovoltaic (PV) and other renewables with energy storage, taking Title 24 another step closer toward the state's zero net energy (ZNE) goals as spelled out in the California Energy Efficiency Strategic Plan (CEC, 2011), calling for all new residential construction to be ZNE by 2020 and all new commercial construction to be ZNE by 2030.

California Code of Regulations Title 24, Part 11. The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development in 2008. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017.

Renewable Electricity Standards. There have been several renewable electricity senate bills in California. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewables Portfolio Standard (RPS) target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the CARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. Senate Bill X1-2 (2011) codifies the Renewable Electricity Standard into law.

Senate Bill 350: The Clean Energy and Pollution Reduction Act of 2015 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 (1) increases the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provides for the evolution of the Independent System Operator (ISO) into a regional organization; and (4) requires the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory

provisions. Among other objectives, the Legislature intends to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Pavley Regulation, Advanced Clean Cars (ACC), and the California Mobile Source Strategy. Assembly Bill 1493 (2002) requires CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The federal Clean Air Act ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed to set its own standards with a federal waiver from the USEPA, granted in 2009. Known as the Pavley Clean Car Standards, AB 1493 regulated GHG emissions from new passenger vehicles (light duty automobiles and medium duty vehicles) from 2009 through 2016.

In January 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for model years 2015 through 2025. The program includes components to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. The zero emissions vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (PHEV) in the 2018 to 2025 model years (CARB, 2017f).

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years, through a transition to zero-emission vehicles (ZEVs), cleaner transit systems and reduction of vehicle miles traveled. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for class 3 – 7 “last mile” delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels (CARB, 2016c).

Executive Order B-16-2012 (Zero-Emission Vehicles). This executive order indicates that all State entities under the Governor’s control support and facilitate the rapid commercialization of zero-emission vehicles. The order contains a target similar to Executive Order S-3-05, but for the transportation sector instead of all sectors: that California target for 2050 a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels. Executive order B-16-2012 also indicates that the CARB, the California Energy Commission, the Public Utilities Commission and other relevant agencies are ordered to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following:

- By 2015: The State’s major metropolitan areas able to accommodate zero-emission vehicles, each with infrastructure plans and streamlined permitting; the State’s manufacturing sector expend zero-emission vehicle and component manufacturing; an increase in the private sector’s investment in zero-emission vehicle infrastructure; and the State’s academic and research institutions contributing to zero-emission vehicle research, innovation and education.
- By 2020: The State’s zero-emission vehicle infrastructure ability to support up to one million vehicles; the costs of zero-emission vehicles competitive with conventional combustion vehicles; zero-emission vehicles accessible to mainstream consumers; widespread use of zero-emission vehicles for public transportation and freight transport; and a decrease in transportation sector GHG emissions as a result of the switch to zero-emission vehicles; electric vehicle charging integrated into the electricity grid.
- By 2025: over 1.5 million zero-emission vehicles on California roads; easy access to zero-emission vehicle infrastructure in California; the zero-emission vehicle industry strong and sustainable part

of California's economy; and California's vehicles displace at least 1.5 billion gallons of petroleum fuels per year.

Sustainable Freight Action Plan. Executive Order B-32-15 directed the State to establish targets to improve freight efficiency, transition to zero emission technologies, and increase the competitiveness of California's freight transport system. The targets are not mandates, but rather aspirational measures of progress towards sustainability for the State to meet and try to exceed. The targets include:

- System Efficiency Target: Improve freight system efficiency by 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030.
- Transition to Zero Emission Technology Target: Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- Increased Competitiveness and Economic Growth Targets: Establish a target or targets for increased State competitiveness and future economic growth within the freight and goods movement industry based on a suite of common-sense economic competitiveness and growth metrics and models developed by a working group comprised of economists, experts, and industry. These targets and tools will support flexibility, efficiency, investment, and best business practices through State policies and programs that create a positive environment for growing freight volumes and jobs, while working with industry to mitigate potential negative economic impacts. The targets and tools will also help evaluate the strategies proposed under the Action Plan to ensure consideration of the impacts of actions on economic growth and competitiveness throughout the development and implementation process.

California Transportation Plan 2040. The California Transportation Plan (CTP) 2040 provides a long-range policy framework to meet future mobility needs and reduce GHG emissions. The CTP defines goals, performance-based policies, and strategies to achieve maximum feasible emission reductions in order to attain a statewide reduction in GHG emissions.

The CTP 2040 recognizes that the Governor is committed to reduce by one-half current petroleum use in cars and trucks; increase from one-third to one-half the electricity derived from renewable sources; double the efficiency savings of existing buildings and make heating fuels cleaner; reduce the release of methane, black carbon, and other short-lived climate pollutants; and manage farm and rangelands, forests, and wetlands to store more carbon.

Transportation GHG reduction strategies within the CTP 2040 include demand management (including telecommuting/working at home, increased carpoolers, and increase car sharing), mode shift (including transit service improvements, high-speed rail, bus rapid transit, expanded bike and pedestrian facilities, carpool land occupancy requirements, and increased HOV lanes), travel cost (implement expanded pricing policies), and operational efficiency (incident/emergency management, Caltrans' Master Plan, ITS/TSM, and eco-driving).

Low Carbon Fuel Standard, Executive Order S-01-07. The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandated that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009. The Low Carbon Fuel Standard requires producers of petroleum based fuels to reduce the carbon intensity of their products, beginning with a quarter of a percent in 2011, ending in a 10 percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS Credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas or hydrogen. The Low Carbon Fuel

Standard was challenged in the United States District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against the CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the CARB to continue to implement and enforce the regulation and vacated the injunction on September 18, 2013, and remanded the case to the district court for further consideration. With the adoption of the 2017 Scoping Plan Update, the Low Carbon Fuel Standard has been increased to an 18 percent reduction in carbon intensity by 2030.

Senate Bill 1383. This bill creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030. The methane emission reduction goals include a 75% reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. **Executive Order S-3-05.** Executive Order S-3-05 was signed by Governor Schwarzenegger in 2005 proclaiming California is vulnerable to the impacts of climate change. It states that increased temperatures could reduce the Sierra Nevada's snowpack, worsen California's air quality problems, and potentially cause a rise in sea levels. The Executive Order establishes total GHG emission targets including emissions reductions to the 2000 level by 2010, and the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target.

Assembly Bill 32 (AB 32). California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The original 2020 GHG emissions limit was 427 million mt CO_2e. The current 2020 GHG emissions limit is 431 million mt CO_2e. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change.

The Scoping Plan was approved by the CARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB, 2008b). The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The CARB rule-making process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by a CARB hearing and rule adoption.

Pursuant to AB 32, the CARB and the Climate Action Team (CAT)[2] did the following:

- Adopted a list of discrete early action measures;
- Established a statewide GHG emissions cap for 2020 based on 1990 emissions and adopted mandatory reporting rules for significant sources of GHG;
- Indicated how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions; and

[2] CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of CARB's jurisdiction.

- Adopted regulations to achieve the maximum technologically feasible and cost-effective reductions in GHG, including provisions for using both market mechanisms and alternative compliance mechanisms.

In June 2007, the CARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The CARB adopted additional early action measures in October 2007 (CARB, 2007a) that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of perfluorocarbons from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and sulfur hexafluoride (SF_6) reductions from the non-electricity sector. The combination of early action measures was estimated to reduce statewide GHG emissions by nearly 16 million mt CO_2e (CARB, 2007b).

AB 32 codifies Executive Order S-3-05's[3] year 2020 goal by requiring that statewide GHG emissions be reduced to 1990 levels by the year 2020.

The first AB 32 Scoping Plan, published in 2008, identified a future cap-and-trade program covering refineries, power plants, industrial facilities, and transportation fuels as a central element of California's overall strategy to reduce GHG emissions to 1990 levels. More information on the Scoping Plan and California's Cap and Trade program is provided below.

Amendments to California Global Warming Solutions Act of 2006: Emission Limit (Senate Bill 32): Signed into law on September 8, 2016, Senate Bill (SB) 32 (Amendments to California Global Warming Solutions Act of 2006: Emission Limit) amends HSC Division 25.5 and codifies the 2030 target in the recent Executive Order B-30-15 (40 percent below 1990 levels by 2030). The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by Executive Order B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels. SB 32 states the intent of the legislature to continue to reduce GHGs for the protection of all areas of the state and especially the state's most disadvantaged communities, which are disproportionately impacted by the deleterious effects of climate change on public health (California Legislative Information Website 2017). SB 32 was passed with companion legislation AB 197, which provides additional direction for developing the Scoping Plan. In 2016, the California State Legislature adopted SB 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030, while AB 197 includes provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

California Cap and Trade Program. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the cap-and-trade program is a core strategy that California is using to meet its statewide GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020 (CA, 2013a). Under the Cap-and-Trade program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, fuel suppliers, and large industrial facilities that emit more than 25,000 metric tons CO2e per year) and declines over time, and facilities subject to the cap can trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions

[3] Executive Order S-3-05 establishes greenhouse gas emission reduction targets for California.

throughout the Program's duration (CA, 2013b). On July 17, 2017 the California legislature passed Assembly Bill 398, extending the Cap-and-Trade program through 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 and 2030 statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not direct GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are assured on a State-wide basis.

Since 2015, fuels, such as gasoline, diesel, and natural gas, have been covered under the Cap-and-Trade Program. Fuel suppliers are required to reduce GHG emissions by supplying low carbon fuels or purchasing pollution permits, called "allowances," to cover the GHGs produced when the conventional petroleum-based fuel they supply is combusted.

2008 Scoping Plan. The California State Legislature adopted AB 32 in 2006 which focuses on reducing greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, the CARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from BAU emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman, and child in California down to about 10 tons per person by 2020.

The Scoping Plan (CARB, 2008b) contains the following 18 strategies to reduce the State's emissions:

1. *California Cap-and-Trade Program Linked to Western Climate Initiative.* Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. *California Light-Duty Vehicle Greenhouse Gas Standards.* Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. *Energy Efficiency.* Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.
4. *Renewable Portfolio Standard.* Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.
5. *Low Carbon Fuel Standard.* Develop and adopt the Low Carbon Fuel Standard.
6. *Regional Transportation-Related Greenhouse Gas Targets.* Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.
7. *Vehicle Efficiency Measures.* Implement light-duty vehicle efficiency measures.
8. *Goods Movement.* Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. *Million Solar Roofs Program.* Install 3,000 MW of solar-electric capacity under California's existing solar programs.
10. *Medium/Heavy-Duty Vehicles.* Adopt medium and heavy-duty vehicle efficiency measures.
11. *Industrial Emissions.* Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and

provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.

12. *High Speed Rail.* Support implementation of a high-speed rail system.
13. *Green Building Strategy.* Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. *High Global Warming Potential Gases.* Adopt measures to reduce high global warming potential gases.
15. *Recycling and Waste.* Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.
16. *Sustainable Forests.* Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.
17. *Water.* Continue efficiency programs and use cleaner energy sources to move and treat water.
18. *Agriculture.* In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

2014 Scoping Plan Update. This First Update to California's Climate Change Scoping Plan (2014 Scoping Plan Update) was developed by the CARB in collaboration with the Climate Action Team and reflects the input and expertise of a range of state and local government agencies. The Update reflects public input and recommendations from business, environmental, environmental justice, utilities and community-based organizations provided in response to the release of prior drafts of the Update, a Discussion Draft in October 2013, and a draft Proposed Update in February 2014.

This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The First Update includes recommendations for establishing a mid-term emissions limit that aligns with the State's long-term goal of an emissions limit 80 percent below 1990 levels by 2050 and sector-specific discussions covering issues, technologies, needs, and ongoing State activities to significantly reduce emissions throughout California's economy through 2050. The focus areas include energy, transportation, agriculture, water, waste management, and natural and working lands (CARB, 2014a). With respect to the transportation sector, California has outlined several steps in the State's zero emission vehicle (ZEV) Action Plan to further support the market and accelerate its growth. Committed implementation of the actions described in the plan will help meet Governor Brown's 2012 Executive Order (EO) B-16-2012, which—in addition to establishing a more specific 2050 GHG target for the transportation sector of 80 percent from 1990 levels—called for 1.5 million ZEVs on California's roadways by 2025.

Achieving such an aggressive 2050 target will require innovation and unprecedented advancements in energy demand and supply (CARB, 2014a). Emissions from 2020 to 2050 will have to decline at more than twice the rate of that which is needed to reach the 2020 statewide emissions limit. In addition to our climate objectives, California also must meet federal clean air standards. Emissions of criteria air pollutants, including ozone precursors (primarily oxides of nitrogen, or NOX) and particulate matter, must be reduced by an estimated 90 percent by 2032 to comply with federal air quality standards. The scope and scale of emission reductions necessary to improve air quality is similar to that needed to meet long-term climate targets. Achieving both objectives will align programs and investments to leverage limited resources for maximum benefit.

2017 Scoping Plan Update. On December 14, 2017, CARB approved the final version of California's 2017 Climate Change Scoping Plan (2017 Scoping Plan Update), which outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels (CARB, 2017e). The 2017 Scoping Plan Update identifies key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation

sustainability, natural and working lands, waste management, and water. Through a combination of data synthesis and modeling, CARB determined that the target Statewide 2030 emissions limit is 260 MMTCO2e, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO2e beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2050 limit set forth by E.O. B-30-15.

The 2017 Scoping Plan Update's strategy for meeting the 2030 GHG target incorporates the full range of legislative actions and state-developed plans that have relevance to the year 2030. These include:

- Extending the low carbon fuel standard (LCFS) beyond 2020 and increasing the carbon intensity reduction requirement to 18 percent by 2030;
- SB 350, which increase renewables portfolio standard (RPS) to 50 percent and requires a doubling of energy efficiency for existing buildings by 2030;
- The 2016 Mobile Source Strategy is estimated to reduce emissions from mobile sources including an 80 percent reduction in smog-forming emissions and a 45 percent reduction in diesel particulate matter from 2016 level in the South Coast Air Basin, a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels;
- The Sustainable Freight Action Plan to improve freight efficiency and transition to zero emission freight handling technologies (described in more detail below);
- SB 1383, which requires a 50 percent reduction in anthropogenic black carbon and a 40 percent reduction in hydrofluorocarbon and methane emissions below 2013 levels by 2030; and
- Assembly Bill 398, which extends the state Cap-and-Trade Program through 2030.

With respect to project-level GHG reduction actions and thresholds for individual development projects, the 2017 Scoping Plan Update Indicates,

> *Beyond plan-level goals and actions, local governments can also support climate action when considering discretionary approvals and entitlements of individual projects through CEQA. Absent conformity with an adequate geographically-specific GHG reduction plan as described in the preceding section above, CARB recommends that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development (CARB, 2017e).*

4.7.2.3 Regional Regulations

Southern California Association of Governments (SCAG) Sustainable Communities Strategy (SCS) within Regional Transportation Plan (RTP) demonstrates the region's ability to attain and exceed the GHG emission reduction targets set by the CARB. The SCS outlines the plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the SCS maximizes current voluntary local efforts that support the goals of SB 375, as evidenced by several Compass Blueprint Demonstration Projects and various county transportation improvements. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network, which emphasizes system preservation, active transportation, and transportation demand management measures.

The RTP/SCS exceeds its greenhouse gas emission-reduction targets set by the CARB by achieving an 8 percent reduction by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 compared to the 2005 level on a per capita basis. Table 4.7-1 shows the assumptions regarding Moreno Valley that SCAG used in its 2016 analysis.

Table 4.7-1: SCAG Assumptions for Moreno Valley

Year	Population	Households	Employment
2012	197,600	51,800	31,400
2040	256,600	73,000	83,200

Source: Southern California Association of Governments 2016
(http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf)

The RTP also includes an appendix on Goods Movement, which describes a process to develop and deploy needed technologies for improving efficiency of goods movement, along with key action steps for public sector agencies to help move the region to that objective. The 2016 RTP/SCS reaffirms zero- and near zero-emission technologies as a priority, and establishes the regional path forward towards improving the goods movement system.

4.7.2.4 City of Moreno Valley Climate Action Strategy

The City of Moreno Valley approved the Energy Efficiency and Climate Action Strategy (Strategy) in October 2012. The Strategy identifies ways that the City can reduce energy and water consumption and greenhouse gas emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and greenhouse gas emissions. The Strategy contains the following policies to reduce greenhouse gas emissions in 2010 by 15 percent by 2020:

R2-T1 *Land Use Based Trips and VMT Reduction Policies.* Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.

R2-T3 *Employment-Based Trip Reductions.* Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.

R2-E1 *New Construction Residential Energy Efficiency Requirements.* Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards.

R2-E2 *New Construction Residential Renewable Energy.* Facilitate the use of renewable energy (such as solar [photovoltaic] panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources off site.

R2-E5 *New Construction Commercial Energy Efficiency Requirements.* Require energy efficient design for all new commercial buildings to be 10 percent beyond the current Title 24 standards.

R3-E1 *Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining.* Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy-efficient projects.

R3-L2 *Heat Island Plan.* Develop measures that address “heat islands.” Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.

R2-W1 *Water Use Reduction Initiative.* Consider adopting a per capita water use reduction goal which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.

R3-W1 *Water Efficiency Training and Education.* Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.

R2-S1 *City Diversion Program.* For solid waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.

4.7.3 Methodology

Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis of project GHG emissions and climate change is based on methodologies and information available at the time this Revised Sections of the FEIR was prepared. Many uncertainties exist regarding the precise relationship between specific levels of GHG emissions and the ultimate impact on global climate. Significant uncertainties also exist regarding the reduction potential of mitigation strategies. Thus, while information is presented below to assist the public and the City's decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the City is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

The recommended approach for GHG analysis included in the California Governor's Office of Planning and Research (OPR's) June 2008 release is to: (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance (Governor's Office of Planning and Research, 2008). Neither the CEQA statute nor Guidelines prescribe quantitative thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation. For local government lead agencies, adoption of General Plan policies and certification of General Plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews."

Pursuant to SB 97, the OPR must develop guidelines for analysis of the effects of GHG emissions. As part of this process, the OPR asked CARB technical staff to recommend statewide interim thresholds of significance for GHGs. The CARB released a preliminary draft staff proposal in October 2008 that included initial suggestions for significance criteria related to industrial, commercial, and residential projects. However, CARB's staff did not adopt or suggest any new statewide thresholds. The OPR finalized its revised *CEQA Guidelines* without reference to CARB's draft proposal.

In March 2010, *CEQA Guidelines* amendments were adopted and include the following direction regarding determination of significant impacts from GHG emissions (Section 15064.4):

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of

greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or

(2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The analysis takes into account the following:

- *CalEEMod.* The latest version of CalEEMod (Version 2016.3.2) was utilized to calculate GHG emissions from the following source categories: construction energy, waste, land use change, architectural coatings and water. For a detailed description of the assumptions used to estimate the GHG emissions, refer to the Air Quality, Greenhouse Gas, and Health Risk Assessment Report.

- *Operational Mobile Assumptions***.** Operational mobile GHG emissions were estimated using the same procedures for the air quality analysis (which includes using EMFAC2014), which is consistent with updated Traffic Impact Analysis. Please refer to Section 4.3.3.2 in the Air Quality Section of this Revised Sections of the FEIR or the revised Air Quality, Greenhouse Gas, and Health Risk Assessment (2018) for a list of those changes.

- *Vehicle Fuel Assumptions:* Mobile emissions in this analysis utilizes EMFAC2014's projected vehicle fuel mix for Phase 1 buildout year 2025 and project buildout year 2040. EMFAC2014 does not include population assumptions for electric or natural gas-fueled trucks. Section 4.17, Energy, of this Revised Sections of the FEIR addresses the potential penetration of electric trucks and potential use in association with the project. Although the State has set targets for zero-emission vehicles, it would be speculative to assume that the High Penetration scenario discussed in Section 4.17 would be practicable or feasible by 2025 or by 2040. The Low and Medium Penetration scenarios discussed in Section 4.17 are possible; however, as a worst-case analysis, the

greenhouse gas analysis included herein does not factor in any potential emissions reductions provided by electric or natural gas-fueled trucks. For informational purposes only, emissions associated with the Medium Penetration scenario has been taken into account to show further emissions reduction potential.

For a detailed discussion of GHG emissions source and methodology, refer to Appendix A of this Revised Sections of the FEIR.

4.7.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, climate change/greenhouse gas emissions impacts would occur if the World Logistics Center project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (i.e., exceeds the SCAQMD's 10,000 mt CO_2e emissions screening threshold of significance); and/or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Global climate change may result in significant adverse effects to the environment that will be experienced worldwide, with some specific effects observed in California. AB 32 requires statewide GHG emissions reductions to 1990 levels by 2020, and SB 32 requires statewide GHG emissions reductions to 40 percent below 1990 levels by 2030. Although these statewide reductions are now mandated by law, no generally applicable GHG emission threshold has yet been established.

State CEQA Guidelines Section 15064(b) provides that "…the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." The *State CEQA Guidelines* further indicate that even when thresholds are established, they may include "identifiable quantitative, qualitative or performance level of a particular environmental effect" (*State CEQA Guidelines*, Section 15064.7).

Some policymakers and regulators suggest that a zero emissions threshold would be appropriate when evaluating GHGs and their potential effect on climate change. Such a rule appears inconsistent with the State's approach to mitigation of climate change impacts. AB 32 and SB 32 do not prohibit all new GHG emissions; rather, they require a reduction in statewide emissions to a given level. Thus, AB 32 and SB 32 recognize that GHG emissions will continue to occur; increases will result from certain activities, but reductions must occur elsewhere.

Individual projects incrementally contribute toward the potential for global climate change (GCC) on a cumulative basis in concert with all other past, present, and probable future projects. While individual projects are unlikely to measurably affect GCC, each of these projects incrementally contributes toward the potential for GCC on a cumulative basis, in concert with all other past, present, and probable future projects. This analysis examines whether the project's emissions should be considered cumulatively significant.

In order to evaluate the significance of a proposed project's environmental impacts related to GHG emissions, it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. As previously described, while project-related GHG emissions can be estimated the direct impact of such emissions on climate change and global warming cannot be determined on the basis of available science. There is no evidence at this time that the World Logistics Center project would directly affect GCC. The SCAQMD has adopted a quantitative GHG emission significance threshold to assess direct impacts from industrial projects where the SCAQMD is the lead agency. The SCAQMD and other air quality agencies agree that GHG and GCC should be assessed as a potentially significant cumulative impact rather than a project-specific impact.

The following is an excerpt from the SCAQMD (Draft Guidance Document – Interim CEQA Greenhouse Gas [GHG] Significance Threshold, October 2008):

> *"The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimate contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.*
>
> *As described below, staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level."*

This project utilizes Tier 3 of the SCAQMD's draft threshold and compares the project's uncapped greenhouse gas emissions to the SCAQMD's threshold for industrial projects, 10,000 mt CO_2e per year. Therefore, the threshold used for this project was based on the goal in Executive Order S-3-05. If the project's uncapped emissions are under the threshold, then the project would be in compliance with Executive Order S-3-05.

In September 2013, the SCAQMD adopted two Negative Declarations stating that GHG emissions subject to the ARB Cap-and-Trade Program do not count against the 10,000 MT CO2e significance threshold the SCAQMD applies when acting as a lead agency. In addition, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has recently taken this one issue a step further and adopted a policy: "CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation." This policy applies when the SJVAPCD is the lead agency and when it is a responsible agency. In short, the SJVAPCD "has determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…." The SJVAPCD classifies ARB's Cap-and-Trade Program as an approved GHG emission reduction plan or GHG mitigation program under CEQA Guidelines Section 15064(h) (3). Here are some other pertinent excerpts from that policy:

- "Consistent with CCR §15064(h)(3), the District finds that compliance with ARB's Cap-and-Trade regulation would avoid or substantially lessen the impact of project-specific GHG emissions on global climate change."
- "The District therefore concludes that GHG emissions increases subject to ARB's Cap-and-Trade regulation would have a less than significant individual and cumulative impact on global climate change."
- "[I]t is reasonable to conclude that implementation of the Cap-and-Trade program will and must fully mitigate project-specific GHG emissions for emissions that are covered by the Cap-and-Trade regulation."
- "[T]he District finds that, through compliance with the Cap-and-Trade regulation, project-specific GHG emissions that are covered by the regulation will be fully mitigated."

The policy acknowledges that "combustion of fossil fuels including transportation fuels used in California (on and off road including locomotives), not directly covered at large sources, are subject to Cap-and-Trade requirements, with compliance obligations starting in 2015." As such, the SJVAPCD concludes that GHG emissions associated with vehicle miles traveled (VMT) cannot constitute significant increases under CEQA. This regulatory conclusion is therefore directly applicable to the WLC project because VMT is by far the largest source of project GHG emissions.

The consideration of only uncapped GHG emissions to determine the significance of those emissions under CEQA used by the SCAQMD and the SJVAPCD was validated in Association of Irritated Residents v. Kern County Board of Supervisors, 17 Cal. App. 5th 708 (2017). The EIR's GHG analysis properly relied on compliance with California's cap-and-trade program to conclude that GHG emissions would be less than significant.

4.7.5 Less than Significant Impacts

Due to the size of the project, all potential impacts related to greenhouse gas emissions are considered to be potentially significant.

4.7.6 Significant Impacts

4.7.6.1 Greenhouse Gas Emissions

Impact	Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Future development that could occur within the World Logistics Center project site could generate GHG emissions during both construction and operation activities. The following activities are associated with the World Logistics Center project and could directly or indirectly contribute to the generation of GHG emissions:

- **Removal of Vegetation (Land Use Change) and Sequestration:** Carbon sequestration is the process of capture and storage of carbon dioxide; trees, vegetation, and soil store carbon in their tissues and wood. The net removal of vegetation for construction from land use change results in a loss of the carbon sequestration in plants. However, planting additional vegetation (sequestration) would result in additional carbon sequestration and would lower the carbon footprint of the project.
- **Construction Activities:** During construction of the World Logistics Center project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Leaks from installation of refrigeration equipment for air conditioning may occur.
- **Gas, Electric, and Water Use:** Natural gas use results in the emissions of CH_4 (the major component of natural gas) and CO_2 from the combustion of natural gas. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. Conveying water to the project and treating wastewater also uses electricity.
- **Solid Waste Disposal:** Solid waste generated by the World Logistics Center project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is approximately 21 times more potent than CO_2. Landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the World Logistics Center project would result in GHG emissions from the combustion of fossil fuels and the use of electricity in daily automobile and truck trips.
- **On-site Equipment:** During operation of the World Logistics Center project, there would be on-site equipment operating, including yard trucks, emergency generators, and forklifts.

Construction Emissions. The World Logistics Center project would emit GHGs mainly from direct sources such as combustion of fuels from worker vehicles and construction equipment, as shown in

Table 4.7-2. The GHG emissions are from all phases of construction. The SCAQMD recommends that construction emissions be averaged over a 30-year period.

Table 4.7-2: Construction Greenhouse Gas Emissions (without mitigation)

Year	Annual Emissions (mt CO_2e)
2020	11,783
2021	11,447
2022	15,056
2023	11,036
2024	20,704
2025	12,384
2026	14,241
2027	11,982
2028	14,057
2029	12,930
2030	15,605
2031	11,894
2032	17,188
2033	15,872
2034	11,839
2035	14,082
Total	222,098
Averaged over 30 years	**7,403**
Capped: Fuel-Based Emission Sources Averaged over 30 years	**7,334**
Uncapped: Refrigerant Installation and Construction Waste Averaged over 30 years	**34**

mt CO_2e = metric tons of carbon dioxide equivalents.
Note: The SCAQMD recommends that construction emissions be averaged over a 30-year period.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report,* 2018
Sources include onsite construction equipment, worker trips, haul trips, vendor trips, refrigerant installation for the air conditioning in the offices, construction waste, and water use. Values presented in the table may not equal the sum due to rounding.

Total Emissions, Worst-Case Scenario. Operational or long-term emissions occur over the life of the project. Included for informational purposes, operational emissions for a worst-case buildout condition are shown in Table 4.7-3. This is a worst-case analysis because it assumes that the entire project would be built-out in 2018. The emissions are presented by greenhouse gas (in tons per year), which was also converted to metric tons of carbon dioxide equivalents (mt CO_2e). The vehicle emissions in the table represent travel within the South Coast Air Basin. The emissions do not take into account mitigation measures to reduce emissions, such as the use of model year 2010 and later diesel trucks on the project site. As shown in the table, the project's uncapped emissions are over the SCAQMD's significance threshold of 10,000 mt CO_2e per year. Therefore, emissions are potentially significant.

The analysis presented in Table 4.7-3 also represents a worst-case analysis because the emission factors do not take into account implementation of California's Mobile Source Strategy and the full reductions expected from newer trucks and cars as a result of the Pavley regulations, the Low Carbon Fuel Standard, and California's Advanced Clean Car program. The emissions are estimated using emission factors from EMFAC2014, CARB's emission factor model, for the year 2018.

Table 4.7-3: Annual Project Operational GHG Emissions (Worst-Case 2018 Analysis at Buildout)

Source	Individual Emissions (tons)					Greenhouse Gas Emissions (mt CO_2e)
	Carbon Dioxide	Methane	Nitrous Oxide	Hydrofluoro-carbons	Black Carbon	
AB 32/SB 32 Capped Emissions						
Mobile (net)	285,523	3.17	1.56	0.00	6.27	263,840
Other	81,599	71.50	185.20	0.00	0.70	126,199
Total	367,122	74.67	186.77	0.00	6.97	390,039
Uncapped Emissions	**9,804**	**504.67**	**0.00**	**1.95**	**0.00**	**22,974**
					Threshold	**10,000**
					Significant?	**Yes**

Notes:
mt CO_2e = metric tons of carbon dioxide equivalents, which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072.
The "other" emissions include the non-mobile capped emissions as presented in Table 4.7-4. below.
Source: *ESA,* 2018

Total Project Emissions. Table 4.7-4 shows the unmitigated project emissions at buildout, including estimates of the project's mobile emissions estimates for future years based on EMFAC emission factors for the actual year assessed, which take into account the Pavley regulations, the Low Carbon Fuel Standard, and California's Advanced Clean Car program. Emissions are shown by individual GHG (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, and black carbon) and totaled used the common unit of metric tons CO2e based on the global warming potential of each gas. Emissions estimates for electricity and natural gas do not account for Project Design Features (described in Energy Section 4.17.5) that improve building energy efficiency and maximize the use of on-site renewable energy

Table 4.7-4 shows project emissions separated into capped and uncapped sectors, as defined by California's cap-and-trade program. California's cap-and-trade program is enforceable and meets the requirements of AB 32 and SB 32. The program began on January 1, 2012, placing GHG emissions limits on capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 MT CO2e per year), and enforcing compliance obligations beginning with 2013 emissions. Vehicle fuels were placed under the cap in 2015, and with the passage of AB 398, the program was extended through 2030. The Cap-and-Trade Program allocates emissions permits across covered entities in each sector.

As shown in Table 4.7-4, the majority of the project's GHG emissions are from sources that are subject to the requirements of the Cap-and-Trade Program. AB 32/SB 32 capped emissions are shown for informational purposes, as those emissions are not compared with the SCAQMD's significance threshold.

Table 4.7-4: Project GHG Emissions at Buildout by GHG (Unmitigated)

Source	Emissions (tons per year)					GHG Emissions (mt CO_2e)
	Carbon Dioxide	Methane	Nitrous Oxide	HFCs	Black Carbon	
AB 32/SB 32 Capped Emissions						
On-road vehicles	*231,254*	*1.05*	*1.70*	*0.00*	*0.63*	*210,708*
Electricity[1]	*60,348*	*62.33*	*158.06*	*0.00*	*0.00*	*54,947*
Construction[2]	*7,550*	*1.36*	*<0.01*	*0.00*	*0.66*	*7,334*
Yard trucks	*5,631*	*0.00*	*0.00*	*0.00*	*0.00*	*5,109*
Electricity-convey water	*2,664*	*5.43*	*0.15*	*0.00*	*0.00*	*2,580*
Natural gas[1]	*4,942*	*2.37*	*26.99*	*0.00*	*0.12*	*4,510*
Generator	*267*	*0.01*	*0.00*	*0.00*	*0.04*	*267*
Forklifts	*197*	*0.00*	*0.00*	*0.00*	*0.01*	*183*
Total AB 32/SB 32 Capped	**312,853**	**72.55**	**186.90**	**0.00**	**1.33**	**285,639**
Significant?	--	--	--	--	--	*No*
Uncapped Emissions						
Waste	8,540	504.67	0.00	0.00	0.00	19,193
Land use change	1,272	0.00	0.00	0.00	0.00	1,154
Refrigerants	0	0.00	0.00	1.89	0.00	2,572
Construction*	115	0.00	0.00	0.06	0.00	166
Sequestration	-122	0.00	0.00	0.00	0.00	-111
Total Uncapped	**9,804**	**504.67**	**0.00**	**1.95**	**0.00**	**22,974**
Threshold	--	--	--	--	--	10,000
Significant impact?	--	--	--	--	--	Yes

mt CO_2e = metric tons of carbon dioxide equivalents which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons [HFC] – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072. <0.01 = less than 0.01

1 – Electricity and natural gas emissions estimates are based on minimum compliance with 2016 Title 24 building standards

2 - Capped construction emissions are from on-road and off-road vehicles, electricity use for equipment, and water use. Uncapped construction emissions are from refrigerants and construction waste. Construction emissions are amortized over 30 years.

Source: *ESA, 2018*

The total emissions estimates for the project, summarized in Table 4.7-5, include both construction and operations emissions, and do not account for Project Design Features (described in Energy Section 4.17.5) that improve building energy efficiency and maximize the use of on-site renewable energy; nor do they account for the project's mitigation measures. Table 4.7-5 shows a summary of AB 32/SB 32 capped and uncapped project emissions (unmitigated) for each year between 2020 and buildout. As shown in the table, the uncapped emissions in the year 2026 and after are over the SCAQMD's significance threshold of 10,000 mt CO_2e per year. Therefore, emissions are potentially significant, and mitigation is required.

Table 4.7-5: Project GHG Emissions (Year by Year without Mitigation)

Source	GHG Unmitigated Emissions (mt CO_2e/year)							
	2020	2021	2022	2023	2024	2025	2026	2027
AB 32/SB 32 Capped Emissions								
On-road vehicles	0	14,688	29,376	48,960	68,544	104,914	126,417	137,770
Electricity[1]	0	4,696	9,393	15,654	21,916	33,545	37,895	40,192
Construction[2]	11,669	11,334	14,916	10,896	20,473	12,153	14,103	11,885
Yard trucks	0	264	528	881	1,233	1,887	2,541	2,887
Electricity to convey water	0	133	267	445	623	953	1,283	1,458
Natural gas	0	381	763	1,271	1,779	2,723	3,087	3,278
Generator	0	14	28	46	64	99	133	151
Forklifts	0	9	19	32	44	68	91	104
Total AB 32 Capped Emissions	11,669	31,520	55,289	78,184	114,676	156,342	185,550	197,724
Uncapped Emissions								
Waste	0	992	1,985	3,308	4,632	7,089	9,547	10,844
Land use change	0	60	119	199	279	426	574	652
Refrigerants	0	133	266	443	621	950	1,279	1,453
Construction refrigerants and waste[2]	114	114	140	140	231	231	198	132
Sequestration	0	-6	-11	-19	-27	-41	-55	-63
Total Uncapped Emissions	**114**	**1,293**	**2,499**	**4,072**	**5,735**	**8,656**	**11,543**	**13,019**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Significant impact?	No	No	No	No	No	No	Yes	Yes

Source	GHG Unmitigated Emissions (mt CO_2e/year)								
	2028	2029	2030	2031	2032	2033	2034	2035	Buildout
AB 32/SB 32 Capped Emissions									
On-road vehicles	144,593	151,416	161,152	172,192	183,233	194,274	201,510	208,747	210,708
Electricity[1]	41,572	42,952	44,922	47,155	49,389	51,622	53,086	54,550	54,947
Construction[2]	13,960	12,806	15,470	11,759	17,052	15,772	11,739	14,029	7,334
Yard trucks	3,094	3,302	3,598	3,934	4,270	4,606	4,826	5,046	5,109
Electricity to convey water	1,562	1,667	1,817	1,986	2,156	2,326	2,437	2,548	2,580
Natural gas	3,394	3,509	3,673	3,860	4,046	4,233	4,355	4,478	4,510
Generator	162	173	188	206	223	241	252	264	267
Forklifts	111	118	129	141	153	165	173	181	183
Total AB 32 Capped Emissions	208,448	215,943	230,949	241,233	260,523	273,238	278,378	289,842	285,638
Uncapped Emissions									
Waste	11,624	12,404	13,517	14,779	16,040	17,302	18,129	18,956	19,193
Land use change	699	746	813	889	965	1,041	1,090	1,140	1,154
Refrigerants	1,558	1,662	1,811	1,980	2,149	2,319	2,429	2,540	2,572
Construction refrigerants and waste[2]	132	174	193	193	193	138	138	64	166
Sequestration	-67	-72	-78	-85	-93	-100	-105	-109	-111
Total Uncapped Emissions	**13,946**	**14,915**	**16,256**	**17,756**	**19,255**	**20,700**	**21,683**	**22,591**	**22,974**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Significant impact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes:
mt CO_2e = metric tons of carbon dioxide equivalents which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072.
1 – Electricity and natural gas emissions estimates are based on minimum compliance with 2016 Title 24 building standard; includes electricity use by on-site EV chargers.
2 – Capped construction emissions are from on-road and off-road vehicles, electricity use for equipment, and water use. Uncapped construction emissions are from refrigerants and construction waste. Construction would not occur at buildout; however, according to SCAQMD recommendations, it is included at buildout as the average over 30 years.
Source: *ESA, 2018*

Project Design Features. The WLCSP incorporates site and building designs (Project Design Features) that emphasize conservation of water and energy, which in turn help reduce greenhouse gas emissions (WLCSP September 2014, Section 1.3.2, Green Building-Sustainable Development). The revised Project Design Features, as outlined in the *Comparison of Renewable Energy Technologies* report (WSP, 2018) and explained in detail in Energy Section 4.17.5, go substantially beyond that previous commitment with energy conservation measures (ECMs) that exceed minimal compliance with current (2016) Title 24 requirements by about 17 percent at Phase 1 and 16 percent at full buildout, and a commitment to maximize the use of onsite rooftop solar PV generation.

Mitigation Measures. The following mitigation measures would reduce the GHG emissions impact of the WLC project. Mitigation measures 4.7.6.1B, 4.7.6.1C, and 4.7.5.1D were previously included in the 2015 FEIR as Utilities Mitigation Measures 4.16.4.6.1A, 4.16.4.6.1B, and 4.16.4.6.1C to address building energy, but energy impacts have now been removed from the Utilities section and considered in the standalone Energy section of this Revised Sections of the FEIR (Section 4.17).

4.7.6.1A The World Logistics Center project shall implement the following requirements to reduce solid waste and greenhouse gas emissions from construction and operation of project development:

a) Prior to January 1, 2020, divert a minimum of 50 percent of landfill waste generated by operation of the project. After January 1, 2020, development shall divert a minimum of 75 percent of landfill waste. In January of each calendar year after project approval the developer and/or Property Owners Association shall certify the percentage of landfill waste diverted on an annual basis.

b) Prior to January 1, 2020, recycle and/or salvage at least 50 percent of non-hazardous construction and demolition debris. After January 1, 2020, recycle and/or salvage at least 75 percent of non-hazardous construction and demolition debris. In January of each calendar year after project approval the developer and/or Property Owners Association shall certify the percentage of landfill waste diverted on an annual basis.

   Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or co-mingled. Calculations can be done by weight or volume, but must be consistent throughout.

c) The applicant shall submit a Recyclables Collection and Loading Area Plan for construction related materials prior to issuance of a building permit with the Building Division and for operational aspects of the project prior to the issuance of the occupancy permit to the Public Works Department. The plan shall conform to the Riverside County Waste Management Department's Design Guidelines for Recyclable Collection and Loading Areas.

d) Prior to issuance of certificate of occupancy, the recyclables collection and loading area shall be constructed in compliance with the Recyclables Collection and Loading Area plan.

e) Prior to issuance of certificate of occupancy, documentation shall be provided to the City confirming that recycling is available for each building.

f) Within six months after occupancy of a building, the City shall confirm that all tenants have recycling procedures set in place to recycle all items that are recyclable, including but not limited to paper, cardboard, glass, plastics, and metals.

g) The property owner shall advise all tenants of the availability of community recycling and composting services.

h) Existing onsite street material shall be recycled for new project streets to the extent feasible.

4.7.6.1B (Previously Included as Utilities Mitigation Measure 4.16.4.6.1A for building energy). Each application for a building permit shall include energy calculations to demonstrate compliance with California Energy Efficiency Standards (Title 24, Part 6). Plans shall show the following:

- Energy-efficient roofing systems, such as "cool" roofs, that reduce roof temperatures significantly during the summer and therefore reduce the energy requirement for air conditioning.
- Cool pavement materials such as lighter-colored pavement materials, porous materials, or permeable or porous pavement, for all roadways and walkways not within the public right-of-way, to minimize the absorption of solar heat and subsequent transfer of heat to its surrounding environment.
- Energy-efficient appliances that achieve the 2016 California Appliance Energy Efficiency Standards (e.g. EnergyStar® Appliances) and use of sunlight-filtering window coatings or double-paned windows

4.7.6.1C (Previously Included as Utilities Mitigation Measure 4.16.4.6.1B building energy). Prior to the issuance of any building permits within the WLC site, each project developer shall submit energy calculations used to demonstrate compliance with the performance approach to the California Energy Efficiency Standards, for each new structure. Plans may include but are not necessarily limited to implementing the following as appropriate:

- High-efficiency air-conditioning with electronic management system (computer) control.
- Isolated High-efficiency air-conditioning zone control by floors/separable activity areas.
- Use of Energy Star ® exit lighting or exit signage.

4.7.6.1D (Previously Included as Utilities Mitigation Measure 4.16.4.6.1C building energy; <u>now modified</u>). Prior to the issuance of a building permit, new development shall demonstrate that each building has implemented the following:

- Install solar panels with a capacity equal to the peak daily demand for the ancillary office uses in each warehouse building <u>or up to the limit allowed by MVU's restriction on distributed solar PV connecting to their grid, whichever is greater;</u>
- Increase efficiency for buildings by implementing either 10 percent over the 2008 Title 24's energy saving requirements or the Title 24 requirements in place at the time the building permit is approved, whichever is more strict; and
- Require the equivalent of "Leadership in Energy and Environmental Design Certified" for the buildings constructed at the World Logistics Center based on Leadership in Energy and Environmental Design Certified standards in effect at the time of project approval.

This measure shall be implemented to the satisfaction of the Building and Safety and Planning Divisions.

Additionally, the following mitigation measures from other sections of the Revised Sections of the FEIR help reduce GHG emissions. The complete air quality and utilities mitigation measures can be found in the executive summary.

Air Quality Mitigation Measure 4.3.6.2A (construction fuel) would require that construction equipment greater than 50 horsepower be USEPA Tier 4 emissions compliant and limits on-site idling of all diesel-powered construction equipment, delivery vehicles, and delivery trucks to three minutes in any one hour.

AQ Mitigation Measure 4.3.6.3B (long haul trucks). Require the operation of model year 2010 diesel trucks or later.

AQ Mitigation Measure 4.3.6.4A: The following measures shall be incorporated as conditions to any Plot Plan approval within the Specific Plan:

- All tenants shall be required to participate in Riverside County's Rideshare Program.
- Storage lockers shall be provided in each building for a minimum of three percent of the full-time equivalent employees based on a ratio of 0.50 employees per 1,000 square feet of building area. Lockers shall be located in proximity to required bicycle storage facilities.
- Class II bike lanes shall be incorporated into the design for all project streets.
- The project shall incorporate pedestrian pathways between on-site uses.
- Site design and building placement shall provide pedestrian connections between internal and external facilities.
- The project shall provide pedestrian connections to residential uses within 0.25 mile from the project site.
- A minimum of two electric vehicle-charging stations for automobiles or light-duty trucks shall be provided at each building. In addition, parking facilities with 200 parking spaces or more shall be designed and constructed so that at least six percent of the total parking spaces are capable of supporting future electric vehicle supply equipment (EVSE) charging locations. Sizing of conduit and service capacity at the time of construction shall be sufficient to install Level 2 Electric Vehicle Supply Equipment (EVSE) or greater.
- Each building shall provide indoor and/or outdoor - bicycle storage space consistent with the City Municipal Code and the California Green Building Standards Code. Each building shall provide a minimum of two shower and changing facilities for employees.
- Each building shall provide preferred and designated parking for any combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles equivalent to the number identified in California Green Building Standards Code Section 5.106.5.2 or the Moreno Valley Municipal Code whichever requires the higher number of carpool/vanpool stalls.
- The following information shall be provided to tenants: onsite electric vehicle charging locations and instructions, bicycle parking, shower facilities, transit availability and the schedules, telecommunicating benefits, alternative work schedule benefits, and energy efficiency.

Utilities Mitigation Measure 4.16.1.6.1A would reduce outdoor water usage which in turn reduces energy use associated with the conveyance of that water.

Utilities Mitigation Measure 4.16.1.6.1B would reduce interior water usage, including low flow fittings, fixtures and equipment.

Utilities Mitigation Measure 4.16.1.6.1C would allow reclaimed water to be used for irrigation.

Figure 4.7.1 displays the unmitigated and mitigated uncapped GHG emissions. As shown in the figure, the mitigated uncapped emissions are less than the significance threshold and are therefore less than significant.

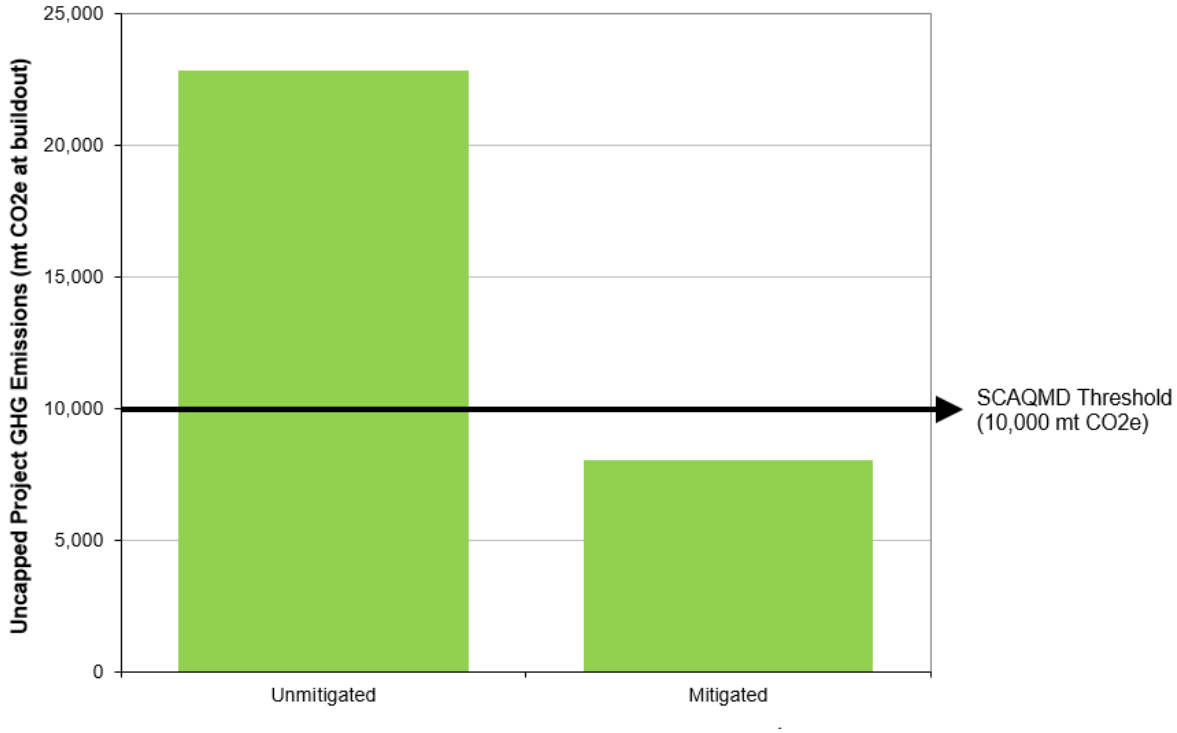


Figure 4.7.1: Uncapped Project GHG Emissions at Buildout

Table 4.7-6 evaluates to what degree the mitigation measures (including the various PDFs of the project as described in Energy Section 4.17.5) will reduce potential GHG emissions.

Table 4.7-7 shows the project GHG emissions with implementation of Project Design Features and mitigation measures, at buildout only. Table 4.7-8 shows the mitigated GHG emissions for each year between 2020 and buildout.

AB 32/SB 32 capped emissions are shown for informational purposes, as those emissions are not compared with the SCAQMD's significance threshold. The tables indicate that with mitigation, the uncapped emissions would not exceed the significance threshold. GHG emissions are less than significant after mitigation.

Level of Impact After Mitigation. Less than significant.

Table 4.7-6: Greenhouse Gas Emissions Reduction Analysis

Category	Operational Mitigation Measure or Project Design Feature[1]	Calculation Method and Reductions
Construction Fuel	**Mitigation Measure 4.3.6.2A** would require that construction equipment be Tier 4.	This reduction was estimated in CalEEMod. Tier 4 construction equipment would have fewer PM2.5 emissions, and therefore black carbon emissions.
Construction Waste	Regulation in the California Green Building Standards require that projects divert (reduce or recycle) at least 50 percent of waste.	This reduction was estimated using the U.S. EPA's Waste Reduction Model (WARM) version 13.
On-road Vehicles: Local	*Project Design Feature:* Local bus service to the area is provided by the Riverside Transit Agency. Local bus routes would typically be extended into the project area when adequate demand is generated from this employment center. Future bus routes could circulate on available looped routes with adequate right-of-way along the major arterial roadways of Redlands Boulevard, Theodore Street, and Alessandro Boulevard. Likewise, the industrial collector roadways provide access to locations nearest building front entrances. Due to building scale, bus stops may be spread out by grouped entrances or centralized gateway drive areas as compared to individual business entries.	The California Air Pollution Control Officer's Association (CAPCOA) report's reduction measure TRT-1 indicates a 5.2 percent reduction in commute vehicle miles traveled for low-density suburbs for inclusion of a commute trip reduction program. However, this reduction is not used in this analysis. In this Revised Sections of the FEIR, no reductions are taken for these measures in order to provide a conservative analysis.
	Mitigation Measure 4.3.6.4A: Class II bike lanes.	
	Mitigation Measure 4.3.6.4A: Participate in Riverside County's rideshare program	
	Mitigation Measure 4.3.6.4A: Lockers for employees.	
	Mitigation Measure 4.3.6.4A: Bicycle storage and changing rooms	
	Project Design Features: The project would have pedestrian circulation, sidewalks, and a multiuse trail.	
	Mitigation Measure 4.3.6.4A*:* Safe pedestrian connections	
	Mitigation Measure 4.3.6.4A: Parking for fuel-efficient vehicles	
On-road Vehicles: Long haul trucks	**Mitigation Measure 4.3.6.3B:** Require model year 2010 diesel trucks or later.	This was implemented by utilizing the emission factors for medium-heavy duty and heavy-heavy duty trucks from EMFAC2014 for year 2010 and after.

Table 4.7-6: Greenhouse Gas Emissions Reduction Analysis

Category	Operational Mitigation Measure or Project Design Feature[1]	Calculation Method and Reductions
On-road Vehicles: all	*Pavley-I Regulation:* A clean-car standard to reduce greenhouse gas emissions from new passenger vehicles (light duty automobiles and medium duty vehicles) from 2009 through 2016. *Low Carbon Fuel Standard:* A fuel standard that requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. *California Mobile Source Strategy:* This 2016 plan includes targets for zero emission vehicles (ZEVs) that exceed assumptions included in EMFAC 2014. Project design includes supporting infrastructure to accommodate future EV populations consistent with targets in the Mobile Source Strategy.	EMFAC2014 provides emission factors for carbon dioxide that include these regulations. Therefore, both the unmitigated and mitigated emissions account for these regulations.
Electricity and Natural Gas: Title 24	**Mitigation Measures 4.7.6.1B** and **4.7.6.1C** would reduce electricity related emissions. In addition, the project would be LEED certified for buildings and Mitigation Measure 4.7.6.1D would require buildings to exceed Title 24 (2008 version) by 10 percent or comply with the current version in place. Project design includes energy conservation measures that would enable the project to exceed 2016 Title 24 energy standards by approximately 17 percent at Phase 1 and 16 percent at Full Buildout, by lowering electrical demand with implementation of sustainability measures such as high efficiency appliances and skylights.	Reductions from exceeding the requirements of Title 24 (2016) were accounted for in calculations.
Electricity: Lighting	**Mitigation Measures 4.7.6.1C** (lighting efficiency) and **4.7.6.1D** (Title 24) would reduce electricity from lighting. Project design includes energy conservation measures that lower electrical demand with implementation of sustainability measures such as high efficiency lighting and motion sensors.	Reductions due to efficient lighting were accounted for in calculations.
Electricity: Solar	**Mitigation Measure 4.7.6.1D** requires that the project install solar panels. Project design includes on-site solar panel installation.	The estimated electricity generation from onsite solar is 24,083 MWh per year, which is 5.0 percent of the electricity demand at buildout. Therefore, 5.0 percent of the unmitigated electricity-related GHG emissions are reduced by solar generation.
Water	**Mitigation Measure 4.16.1.6.1A** would reduce outdoor water usage	CalEEMod mitigation for water-efficient irrigation systems (6.1% reduction, CalEEMod default)

Table 4.7-6: Greenhouse Gas Emissions Reduction Analysis

Category	Operational Mitigation Measure or Project Design Feature[1]	Calculation Method and Reductions
	Mitigation Measure 4.16.1.6.1B would reduce interior water usage, including low flow fittings, fixtures and equipment.	CalEEMod mitigation for: - low-flow toilet (20% reduction in flow, CalEEMod default) - low flow bathroom faucet (32% reduction in flow, CalEEMod default) - low-flow kitchen faucet (18% reduction in flow, CalEEMod default) - low-flow shower (20% reduction in flow, CalEEMod default)
	Mitigation Measure 4.16.1.6.1C would allow reclaimed water to be used for irrigation.	No reductions are taken for the potential use of reclaimed water.
Waste	**Mitigation Measure 4.7.6.1A***:* Recycling and composting to divert construction and operational waste by at least 50 percent before 2020 and 75 percent thereafter.	The project would commit to reducing construction and operational waste by 50 percent prior to 2020 and 75 percent after; therefore, a 75 percent reduction is applied.
	Project Design Feature: Specific Plan (Section 5.1.6) requires that all development within the project provide enclosures or compactors for trash and recyclable materials.	

[1] Project design features are from the WLC Project Description and WLC Sustainable Energy Plan (WSP, 2018); mitigation measures are shown in Section 1.0, Table 1.B.
Source: *Air Quality, Greenhouse Gas, and Health Risk Assessment Report,* 2018

Table 4.7-7: GHG Reductions at Buildout (with Mitigation)

Type of Emissions	Source	GHG Emissions (mt CO_2e) at Buildout		
		Unmitigated	Reductions from Mitigation	With Reductions (Mitigated)
AB 32/SB 32 Capped Emissions	On-road vehicles	210,708	-112	210,596
	Electricity[1]	54,947	-4,579	50,368
	Construction[2]	7,334	0	7,334
	Yard trucks	5,109	0	5,109
	Electricity to convey water	2,580	-271	2,308
	Natural Gas[1]	4,510	-4,510	0
	Generator	267	19	286
	Forklifts	183	0	183
	Solar PV	0	-3,386	-3,386
	Total	**285,638**	**-12,840**	**272,799**
	Significant?	No	—	—
Uncapped Emissions	Waste	19,193	-14,395	4,798
	Land use change	1,154	0	1,154
	Refrigerants	2,572	0	2,572
	Construction waste and refrigerants[2]	166	-17	149
	Sequestration	-111	0	-111
	Total	**22,974**	**-14,412**	**8,563**
	Threshold	10,000	—	10,000
	Significant?	Yes	—	No

Notes:
mt CO_2e = metric tons of carbon dioxide equivalents which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072.
1 - Electricity and natural gas emissions estimates account for PDFs that improve energy efficiency and eliminate the use of building natural gas; includes electricity use by on-site EV chargers.
2 - Capped construction emissions are from on-road and off-road vehicles, electricity use for equipment, and water use. Uncapped construction emissions are from refrigerants and construction waste. Construction would no longer occur at buildout; however, according to SCAQMD recommendations, construction emissions are included as amortized over 30 years.

Source: *ESA, 2018*

Table 4.7-8: Project GHG Emissions (Year by Year with Mitigation)

Source	GHG Mitigated Emissions (mt CO_2e/year)							
	2020	2021	2022	2023	2024	2025	2026	2027
AB 32/SB 32 Capped Emissions								
On-road vehicles	0	14,601	29,202	48,670	68,138	104,293	125,899	137,307
Electricity[1]	0	4,235	8,469	14,116	19,762	30,248	34,337	36,496
Construction[2]	11,669	11,334	14,916	10,896	20,473	12,153	14,103	11,885
Yard trucks	0	264	528	881	1,233	1,887	2,541	2,887
Electricity to convey water	0	119	239	398	557	853	1,148	1,304
Natural gas[1]	0	0	0	0	0	0	0	0
Generator	0	15	30	49	69	106	142	161
Forklifts	0	9	19	32	44	68	91	104
Solar PV	0	-179	-357	-595	-834	-1,276	-1,705	-1,931
Total AB 32/SB 32 Capped Emissions	11,669	30,399	53,046	74,446	109,443	148,331	176,557	188,213
Uncapped Emissions								
Waste	0	248	496	827	1,158	1,772	2,387	2,711
Land use change	0	60	119	199	279	426	574	652
Refrigerants	0	133	266	443	621	950	1,279	1,453
Construction waste and refrigerants[2]	97	97	123	123	214	214	181	115
Sequestration	0	-6	-11	-19	-27	-41	-55	-63
Total Uncapped Emissions	**97**	**532**	**993**	**1,574**	**2,245**	**3,322**	**4,366**	**4,869**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Significant impact?	No	No	No	No	No	No	No	No

Source	GHG Mitigated Emissions (mt CO_2e/year)								
	2028	2029	2030	2031	2032	2033	2034	2035	Buildout
AB 32/SB 32 Capped Emissions									
On-road vehicles	144,163	151,018	160,801	171,895	182,989	194,083	201,354	208,625	210,596
Electricity[1]	37,794	39,091	40,943	43,043	45,143	47,242	48,619	49,995	50,368
Construction[2]	13,960	12,806	15,470	11,759	17,052	15,772	11,739	14,029	7,334
Yard trucks	3,094	3,302	3,598	3,934	4,270	4,606	4,826	5,046	5,109
Electricity to convey water	1,398	1,492	1,626	1,778	1,929	2,081	2,181	2,280	2,308
Natural gas[1]	0	0	0	0	0	0	0	0	0
Generator	173	185	201	220	239	258	270	282	286
Forklifts	111	118	129	141	153	165	173	181	183
Solar PV	-2,068	-2,204	-2,398	-2,618	-2,838	-3,059	-3,203	-3,347	-3,386
Total AB 32/SB 32 Capped Emissions	198,626	205,810	220,371	230,152	248,938	261,149	265,958	277,092	272,799
Uncapped Emissions									
Waste	2,906	3,101	3,379	3,695	4,010	4,326	4,532	4,739	4,798
Land use change	699	746	813	889	965	1,041	1,090	1,140	1,154
Refrigerants	1,558	1,662	1,811	1,980	2,149	2,319	2,429	2,540	2,572
Construction refrigerants and waste[2]	115	147	176	176	176	121	121	47	149
Sequestration	-67	-72	-78	-85	-93	-100	-105	-109	-111
Total Uncapped Emissions	**5,211**	**5,595**	**6,102**	**6,655**	**7,208**	**7,706**	**8,069**	**8,357**	**8,563**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Significant impact?	No	No	No	No	No	No	No	No	No

mt CO_2e = metric tons of carbon dioxide equivalents, which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072.

1 - Electricity and natural gas emissions estimates account for PDFs that improve energy efficiency and eliminate the use of building natural gas; includes electricity use by on-site EV chargers.

2 - Capped construction emissions are from on-road and off-road vehicles, electricity use for equipment, and water use. Uncapped construction emissions are from refrigerants and construction waste. Estimated construction emissions are included prior to buildout; at buildout, the total construction averaged over 30 years is shown.

Source: *ESA, 2018*

Operational Emissions, Scoping Plan Scenario (Included for informational purposes only). The emissions presented under the Scoping Plan scenario (Table 4.7-10) assume successful implementation of the 2017 Scoping Plan Update, which included the Mobile Source Strategy in addition to the Pavley regulations, the Low Carbon Fuel Standard, and California's Advanced Clean Car program. The mobile emissions estimates for future years are based on emission factors that account for higher penetrations of electric vehicles (EVs) than assumed by EMFAC.

The Scoping Plan Scenario assumes that California's 2016 Mobile Source Strategy (MSS) would be implemented as a key strategy in the 2017 Scoping Plan Update for meeting the state's 2030 GHG target (presented in the Energy section as Vehicle Scenario B: Medium EV Penetration). The MSS has a target of 4.2 million zero emission vehicles (ZEVs) in operation statewide by 2030. As explained in the Energy Section, after 2025 the sales and penetration of ZEVs under the MSS start to exceed the numbers assumed by EMFAC 2014. Table 4.7-9 shows that under the MSS approximately 8.4 percent of the passenger vehicle (LDA) and light truck (LDT) fleet is expected to powered by electricity or other zero emission engines by 2025 in the South Coast AQMD region, compared to 6.2 percent using EMFAC 2014 assumptions. By 2040, 42.2 percent of cars and light trucks are expected to be ZEVs in the South Coast AQMD region, compared to 13.7 percent using EMFAC 2014 assumptions.

Table 4.7-9: California and SCAQMD Electric Vehicle (EV) Penetration Estimates

		EMFAC 2014				Mobile Source Strategy	
Jurisdiction	Year	Total LDA + LDT Population	EV Population	% EV	EV Sales in year as % of total	EV Population	% EV
SCAQMD	2020	6,970,018	139,875	2.0%	4.9%	139,875	2.0%
	2025	7,700,136	475,480	6.2%	9.6%	646,695	8.4%
	2030	8,467,075	841,661	9.9%	9.6%	1,797,448	21.2%
	2040	9,634,507	1,316,666	13.7%	9.6%	4,064,551	42.2%
Statewide	2020	16,052,322	307,181	1.9%	4.9%	307,181	1.9%
	2025	17,860,364	1,075,826	6.0%	9.9%	1,500,000	8.4%
	2030	19,784,562	1,959,302	9.9%	9.6%	4,200,000	21.2%
	2040	22,755,593	3,133,990	13.8%	9.6%	9,600,000	42.2%

LDA = Passenger cars (EMFAC category)
LDT = Light Duty Trucks (EMFAC category)
Sources: CARB, 2014b - based on EMFAC2011 Categories, and EMFAC2014 Volume III - Technical Documentation

For informational purposes only, emissions associated with the Scoping Plan Scenario (the Medium EV Penetration scenario) are shown in Table 4.7-10.

Table 4.7-10: Project GHG Emissions (Year by Year with Mitigation and Medium EV Penetration) – Scoping Plan Scenario, For Informational Purposes Only

	GHG Mitigated Emissions (mt CO_2e/year)							
Source	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
AB 32/SB 32 Capped Emissions								
On-road vehicles	0	14,622	29,245	48,741	68,238	104,445	124,584	135,216
Electricity[1]	0	4,302	8,605	14,341	20,078	30,731	37,945	41,815
Construction[2]	11,669	11,334	14,916	10,896	20,473	12,153	14,103	11,885
Yard trucks	0	264	528	881	1,233	1,887	2,541	2,887
Electricity to convey water	0	119	239	398	557	853	1,148	1,304
Natural gas[1]	0	0	0	0	0	0	0	0
Generator	0	15	30	49	69	106	142	161
Forklifts	0	9	19	32	44	68	91	104
Solar PV	0	-179	-357	-595	-834	-1,276	-1,705	-1,931
Total AB 32/SB 32 Capped Emissions	11,669	30,488	53,224	74,742	109,858	148,966	178,890	191,441
Uncapped Emissions								
Waste	0	248	496	827	1,158	1,772	2,387	2,711
Land use change	0	60	119	199	279	426	574	652
Refrigerants	0	133	266	443	621	950	1,279	1,453
Construction refrigerants and waste[2]	97	97	123	123	214	214	181	115
Sequestration	0	-6	-11	-19	-27	-41	-55	-63
Total Uncapped Emissions	**97**	**532**	**993**	**1,573**	**2,245**	**3,321**	**4,366**	**4,868**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Significant impact?	No	No	No	No	No	No	No	No

Source	GHG Mitigated Emissions (mt CO_2e/year)								
	2028	2029	2030	2031	2032	2033	2034	2035	Buildout
AB 32/SB 32 Capped Emissions									
On-road vehicles	141,606	147,996	157,114	167,455	177,795	188,135	194,912	201,689	203,526
Electricity[1]	44,117	46,418	49,703	53,427	57,152	60,877	63,318	65,759	66,421
Construction[2]	13,960	12,806	15,470	11,759	17,052	15,772	11,739	14,029	7,334
Yard trucks	3,094	3,302	3,598	3,934	4,270	4,606	4,826	5,046	5,109
Electricity to convey water	1,398	1,492	1,626	1,778	1,929	2,081	2,181	2,280	2,308
Natural gas[1]	0	0	0	0	0	0	0	0	0
Generator	173	185	201	220	239	258	270	282	286
Forklifts	111	118	129	141	153	165	173	181	183
Solar PV	-2,068	-2,204	-2,398	-2,618	-2,838	-3,059	-3,203	-3,347	-3,386
Total AB 32/SB 32 Capped Emissions	202,392	210,115	225,444	236,096	255,753	268,835	274,216	285,920	281,781
Uncapped Emissions									
Waste	2,906	3,101	3,379	3,695	4,010	4,326	4,532	4,739	4,798
Land use change	699	746	813	889	965	1,041	1,090	1,140	1,154
Refrigerants	1,558	1,662	1,811	1,980	2,149	2,319	2,429	2,540	2,572
Construction refrigerants and waste[2]	115	157	176	176	176	121	121	47	149
Sequestration	-67	-72	-78	-85	-93	-100	-105	-109	-111
Total Uncapped Emissions	**5,211**	**5,594**	**6,101**	**6,655**	**7,207**	**7,707**	**8,067**	**8,357**	**8,562**
Threshold	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

mt CO_2e = metric tons of carbon dioxide equivalents, which is calculated from the emissions (tons/year) by multiplying by the individual global warming potential (carbon dioxide – 1, methane – 21, nitrous oxide – 310, hydrofluorocarbons – 1500, black carbon 760) and converted to metric tons by multiplying by 0.9072.

1 - Electricity and natural gas emissions estimates account for PDFs that improve energy efficiency and eliminate the use of building natural gas; includes electricity use by on-site EV chargers.

2 - Capped construction emissions are from on-road and off-road vehicles, electricity use for equipment, and water use. Uncapped construction emissions are from refrigerants and construction waste. Estimated construction emissions are included prior to buildout; at buildout, the total construction averaged over 30 years is shown.

Source: *ESA, 2018*

4.7.6.2 Greenhouse Gas Plan, Policy, Regulation Consistency

Impact	Would the proposed project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

This impact assesses whether the project would conflict with any applicable plans, policies, or regulations, as discussed below.

Federal and State Reduction Strategies. Table 4.7-11 evaluates the consistency of the World Logistics Center project with the various Federal and State energy conservation strategies and other regulations related to GHG emissions.

Table 4.7-11: Project Compliance with Federal/State Greenhouse Gas Reduction Strategies

Strategy	Project Consistency
Mandatory Codes	
California Green Building Code. The Cal Green Code (Title 24, Part 11) prescribes a wide array of measures that would directly and indirectly result in reduction of GHG emissions from the Business as Usual Scenario (California Building Code). The mandatory measures that are applicable to nonresidential projects include site selection, energy efficiency, water efficiency, materials conservation and resource efficiency, and environmental quality measures.	**Consistent.** The project will be required to adhere to the non-residential mandatory measures as required by the Cal Green Code.
Energy Efficiency Measures	
Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	**Consistent with Mitigation Incorporated.** The project will comply with current California Building Code (CBC) requirements for building construction. **Mitigation Measures 4.7.6.1B** and **4.7.6.1C** would increase energy efficiency. **Mitigation Measure 4.7.6.1D** would require that the project exceed Title 24 (2008 version) by 10 percent or comply with the current version. The WLC Project Design Features (explained in detail in Energy Section 4.17.5) go further by committing the project to energy conservation measures that will enable the project to exceed the more rigorous 2016 Title 24 requirements by approximately 17 percent at Phase 1 and 16 percent at full buildout.
Renewables Portfolio Standard. Achieve a 50 percent renewable energy mix statewide by 2050. Qualifying renewable energy sources under the RPS include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	**Not Applicable.** The project is not part of the State's power generation grid, but would install solar photovoltaic panels on project roofs pursuant to **Mitigation Measure 4.7.6.1D**. The solar PV would reduce the project's electricity related emissions by approximately 5.0 percent. In addition, Moreno Valley Electric Utility is subject to the Renewable Portfolio Standard.

Table 4.7-11: Project Compliance with Federal/State Greenhouse Gas Reduction Strategies

Strategy	Project Consistency
Water Conservation and Efficiency Measures	
Water Use Efficiency. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The CalGreen Code, including the California Plumbing Code (Part 5), promotes water conservation. Title 20 and includes appliance and fixture efficiency standards that promote water conservation.	**Consistent with Mitigation Incorporated.** The project will be required to adhere to the non-residential mandatory measures as required by the Cal Green Code and the Specific Plan outlines a number of water conservation measures, and **Mitigation Measures 4.16.1.6.1A** through **4.16.1.6.1C** will help reduce potential water use even further.
Solid Waste Reduction Measures	
Increase Waste Diversion, Composting, and Commercial Recycling, and Move Toward Zero-Waste. AB 341 mandates commercial recycling and sets a goal that 75 percent of the state's solid waste generated be reduced, recycled, or composted by 2020. AB 1826 adds requirements regarding mandatory commercial organics recycling. SB 1383 requires methane emissions reduction from landfills and sets statewide disposal targets to reduce landfilling of organic waste by 50 percent from the 2014 level by 2020, and 75 percent from the 2014 level by 2025.	**Consistent with Mitigation Incorporated.** Data available from the California Integrated Waste Management Board (CIWMB) indicate that the City of Moreno Valley has not achieved the 50 percent diversion rate. The project will comply with **Mitigation Measure 4.7.6.1A** to help increase solid waste diversion, composting, and recycling. The measure would also require 50 percent diversion of construction waste prior to 2020 and 75 percent diversion starting in 2020.
Transportation and Motor Vehicle Measures	
Pavley Regulations and Vehicle Fuel Efficiency Standards. AB 1493 (Pavley) and the Advanced Clean Car (ACC) program require the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles and light-duty trucks. Regulations were adopted by the CARB in September 2004 and expanded with the ACC program in 2012.	**Consistent.** The project does not involve the manufacture of vehicles or production of vehicle fuels. However, vehicles that are purchased and used within the project site would comply with any vehicle and fuel standards that the CARB adopts or has adopted. In addition, the project would require that all diesel trucks be 2010 or newer (**Mitigation Measure 4.3.6.3B**) and would be built to support the charging of future electric-powered vehicles anticipated by the Mobile Source Strategy. The Project design also includes supporting infrastructure to accommodate future EV populations consistent with targets in the Mobile Source Strategy.
Light-Duty Vehicle Efficiency Measures. Implement additional measures that could reduce light-duty vehicle GHG emissions. For example, measures to ensure that tires are properly inflated can both reduce GHG emissions and improve fuel efficiency.	
Heavy- and Medium-Duty Fuel and Engine Efficiency Measures. Regulations to require retrofits to improve the fuel efficiency of heavy-duty trucks that could include devices that reduce aerodynamic drag and rolling resistance. This measure could also include hybridization of and increased engine efficiency of vehicles.	
Mobile Source Strategy. This 2016 plan includes a target of 4.2 million zero emission vehicles (ZEVs) by 2030, and GHG reductions from medium-duty and heavy-duty vehicles, and transit. It also includes reductions in GHGs from medium-duty and heavy-duty vehicles via the Phase 2 Medium and Heavy-Duty GHG Standards.	

Table 4.7-11: Project Compliance with Federal/State Greenhouse Gas Reduction Strategies

Strategy	Project Consistency
Low Carbon Fuel Standard. The CARB identified this measure as a Discrete Early Action Measure in the 2008 Scoping Plan. As included in the Mobile Source Strategy, this measure would reduce the carbon intensity of California's transportation fuels by at least 18 percent by 2030.	
Sustainable Freight Action Plan. The 2016 plan directs the State to establish targets to improve freight efficiency, transition to zero emission technologies, and increase the competitiveness of California's freight transport system.	
Regional Transportation-Related GHG Targets. Develop regional GHG emissions reduction targets for passenger vehicles, as required by SB 375. Local governments will play a significant role in the regional planning process to reach passenger vehicle GHG emissions reduction targets. Local governments have the ability to directly influence both the siting and design of new residential and commercial developments in a way that reduces GHGs associated with vehicle travel.	**Not Applicable.** Specific regional emission targets for transportation emissions do not directly apply to the WLC project; regional GHG reduction target development is outside the scope of this project. The project will comply with any plans developed by the City of Moreno Valley.
Measures to Reduce High Global Warming Potential (GWP) Gases.	
Short-Lived Climate Pollutant Strategy. SB 1383 (2016) requires the CARB to approve and implement Short-Lived Climate Pollutant strategy to reduce high GWP GHGs to achieve a statewide reduction in methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030.	**Not Applicable.** New products used or serviced on the WLC project site (after implementation of the reduction of GHG gases) would comply with future CARB rules and regulations, as would vehicles (with their refrigerants used in air conditioning systems) visiting the site.

AB = Assembly Bill CARB = California Air Resources Board
GHG = greenhouse gas
Source: based on analysis in the *Air Quality, Greenhouse Gas, and Health Risk Assessment Report,* 2018

With implementation of applicable strategies/measures, project design features, and mitigation measures, the project's contribution to cumulative GHG emissions would be reduced. In order to ensure that the World Logistics Center project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32 and SB 32, the Mitigation Measures and Project design Features listed in the above table shall be implemented.

The project will comply with existing State and Federal regulations regarding the energy efficiency of buildings, appliances, and lighting. The warehouse buildings will be built in compliance with the California Building Code to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices. In addition, **Mitigation Measure 4.7.6.1D** requires that the project will exceed the Title 24 energy conservation standards (2008 version) by 10 percent or comply with the current version, while the WLC Project Design Features go even further by committing the project to energy conservation measures that will enable the project to exceed the more rigorous 2016 Title 24 requirements by approximately 17 percent at Phase 1 and 16 percent at full buildout.

CARB Scoping Plan and the California Cap and Trade Program. AB 32 focuses on reducing GHG emissions to 1990 levels by the year 2020, while SB 32 has a target of 40 percent below

1990 levels by 2030. Pursuant to the requirements in AB 32, the CARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which contains a variety of strategies to reduce the State's emissions. The First Update to the Scoping Plan was approved in 2014 and the Second Update was approved in 2017 following the passage of SB 32. As described in Section 4.7.2.2 – State Regulations/Standards, AB 398 extended California's cap-and-trade program through 2030 and the program is adopted as a core strategy in the 2017 Scoping Plan Update for meeting the state's GHG reduction targets for 2020 and 2030. The 2017 Scoping Plan Update incorporates all of the state's GHG reduction strategies included in Table 4.7-11. Table 4.7-12 considers the strategies in 2017 Scoping Plan Update that are not included in Table 4.7-11, indicating that all are either consistent with or not applicable to the project; therefore, the project does not conflict with the Scoping Plan.

Table 4.7-12: Analysis of Additional Measures in the 2017 Scoping Plan Update

Scoping Plan Reduction Measure	Consistency Analysis
1. **California Cap-and-Trade Program Linked to Western Climate Initiative.** Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	**Not Applicable.** California's cap-and-trade system covers products or services (such as electricity) and the cost of the cap-and-trade system would be transferred to the consumers. Large industrial uses are the most likely source of participants for this program, and it is not likely individual logistics warehousing will be an active participant in this program. Under AB 32 and SB 32, emissions from natural gas use, transportation fuel use, and electricity generation are covered under the cap-and-trade program and subject to the program's emission reduction requirements.
16. **Carbon Sequestration in Natural and Working Lands**. Natural and working lands – including forests and agricultural lands – are a key sector in the State's climate change strategy. Storing carbon in trees, other vegetation, soils, and aquatic sediment is an effective way to remove carbon dioxide from the atmosphere. The 2017 Scoping Plan Update describes policies and programs that prioritize protection and enhancement of California's landscapes, and commits the State to finalizing a carbon sequestration and GHG emissions reduction goal for natural and working lands by September 2018	**Not Applicable.** No forested lands exist on site. As reported in the Agriculture and Forestry Resources section 4.2.1, approximately 2,200 acres of the 2,610-acre Specific Plan area is currently dry farmed, mainly with winter wheat. However, the state's Natural and Working Lands Climate Change Implementation Plan has not been adopted, and there is no protection currently in place to preserve the site for agriculture. Further, as described in the Agriculture and Forestry Resources section, the conversion of the existing agricultural lands to urban uses is supported by the City's General Plan policies, and the entire project site and adjacent lands have been designated for urban uses for nearly 20 years by the City. The Agriculture and Forestry Resources section concludes that project implementation will result in less than significant impacts to conversion of Farmland of Local Importance.

Source: CARB, 2017e

City General Plan Policies. The project must also be evaluated against the City's General Plan policies that relate to greenhouse gas emissions, as shown in Table 4.7-13. This analysis shows that the project is consistent with the applicable General Plan objectives and policies, or the particular objective or policy is not applicable to the proposed WLC project.

Table 4.7-13: Consistency with City General Plan Air Quality Policies

Objective or Policy	Project Consistency
Objective 6.6. Promote land use patterns that reduce daily automotive trips and reduce trip distance for work, shopping, school, and recreation.	**Consistent.** The project is providing employment opportunities to Moreno Valley and the surrounding area.
Policy 6.6.1. Provide sites for new neighborhood commercial facilities within close proximity to the residential areas they serve.	**Not Applicable.** The project does not propose the development of neighborhood commercial facilities or residential dwellings.
Policy 6.6.2. Provide multifamily residential development sites in close proximity to neighborhood commercial centers in order to encourage pedestrian instead of vehicular travel.	**Not Applicable.** The project is industrial and does not propose the development of residential uses.
Policy 6.6.3. Locate neighborhood parks in close proximity to the appropriate concentration of residents in order to encourage pedestrian and bicycle travel to local recreation areas.	**Not Applicable.** The project is industrial and does not propose the development of residential uses.
Objective 6.7. Reduce mobile and stationary source air pollutant emissions.	**Consistent.** The project would be implementing feasible Mitigation Measures to reduce mobile and stationary emissions (**Mitigation Measures 4.3.6.3B, 4.3.6.3C, 4.3.6.3D,** and **4.3.6.4A**).
Policy 6.7.1. Cooperate with regional efforts to establish and implement regional air quality strategies and tactics.	**Not Applicable.** This measure is beyond the scope of the project; the City will continue to work with the SCAQMD in regional planning efforts.
Policy 6.7.2. Encourage the financing and construction of park-and-ride facilities.	**Not Applicable.** The project consists of industrial uses; a park and ride on the project would not be feasible.
Policy 6.7.3. Encourage express transit service from Moreno Valley to the greater metropolitan areas of Riverside, San Bernardino, Orange and Los Angeles Counties.	**Not Applicable.** No express mass transit facilities are designated on the project site or planned on the project site; therefore, this measure is beyond the scope of the project.
Policy 6.7.6. Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code.	**Consistent.** The project will comply with Title 24 requirements.

Policies 6.7.4 and 6.7.5 are discussed in the air quality EIR section, Section 4.3).
Source of objectives and policies: Moreno Valley General Plan (2006).

City Climate Action Strategy. Finally, Table 4.7-14 evaluates the consistency of the World Logistics Center project with the policies of the City's Climate Action Strategy approved in October 2012. As shown below, the project is consistent with the requirements of the Strategy for non-residential development with implementation of project design features and mitigation measures.

Table 4.7-14: Consistency with City Climate Action Strategy

Strategy Items	Project Consistency
R2-T1: Land Use Based Trips and VMT Reduction Policies. Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.	**Not Applicable.** A Transit Priority Project is one that has at least 50 percent residential use based on area, at least 20 units per acre and is within a ½ mile of a major transit stop or High Quality Transit Corridor. A High Quality Transit Corridor is defined as one with 15-minute frequencies during peak commute hours. The project does not include a residential component and is not along a High Quality Transit Corridor nor are there any High Quality Transit Corridors or major transit stops in the vicinity of the project area. As a result, the strategy is not applicable.

Table 4.7-14: Consistency with City Climate Action Strategy

Strategy Items	Project Consistency
R2-T3: Employment-Based Trip Reductions. Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.	**Consistent** with implementation of **Mitigation Measure 4.3.6.4A.**
R2-E1: New Construction Residential Energy Efficiency Requirements. Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards.	**Not Applicable.** This measure applies to residential projects.
R2-E2: New Construction Residential Renewable Energy. Facilitate the use of renewable energy (such as solar (photovoltaic) panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources offsite.	**Not Applicable.** This measure applies to residential projects.
R2-E5: New Construction Commercial Energy Efficiency Requirements. Require energy efficient design for all new commercial buildings to be 10% beyond the current Title 24 standards.	**Consistent** with **Mitigation Measure 4.7.6.1D.**
R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining. Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy efficient projects.	**Not Applicable.** This refers to updating building and zoning codes and does not apply to this warehousing development plan.
R3-L2: Heat Island Plan. Develop measures that address "heat islands." Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.	**Consistent.** The Specific Plan indicates that vehicle parking areas are to be landscaped to provide a shade canopy (50 percent coverage at maturity).
R2-W1: Water Use Reduction Initiative. Consider adopting a per capita water use reduction goal which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.	**Consistent.** California Green Building Standards Code, Chapter 5, Division 5.3, Section 5.303.2 requires that indoor water use be reduced by 20 percent. Section 5.304.3 requires irrigation controllers and sensors. The Specific Plan also contains a variety of water conservation features. **Mitigation Measures 4.16.1.6.1A, B,** and **C** also provide water reduction measures.
R3-W1: Water Efficiency Training and Education. Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.	**Consistent.** Tenants and owners within the WLC site will provide water conservation information from EMWD and other sources to workers on a regular basis.
R2-S1: City Diversion Program. For Solid Waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.	**Consistent.** The project would incorporate standard City waste reduction features and **Mitigation Measure 4.7.6.1A** (has a target to reduce waste by 75 percent by 2020).
C11: Require that developer recycle existing street material for use as base for new streets.	**Consistent.** Project will implement **Mitigation Measure 4.7.6.1A** where feasible.

Executive Order S-3-05. As discussed in Section 4.7.4, the SCAQMD developed its thresholds based on consistency with California Executive Order S-3-05. As shown in Impact 4.7.6.1, the project's uncapped GHG emissions would not exceed the SCAQMD's industrial threshold.

Therefore, the project would not conflict with Executive Order S-3-05. This impact is less than significant.

Specific Plan Design Features. The WLCSP contains a sustainability section that emphasizes water and energy conservation throughout the project design, which in turn will help reduce GHG emissions (Section 1.3.2, Green Building-Sustainable Development). The revised WLC Project Design Features (described in detail in Energy Section 4.17.5) go beyond the WLSCP with energy conservation measures that exceed minimal compliance with current (2016) Title 24 requirements by about 17 percent at Phase 1 and 16 percent and full buildout.

Mitigation Measures. Implementation of previously referenced Mitigation Measures 4.3.6.3B, 4.3.6.4A, 4.3.6.3C, 4.3.6.3D, 4.7.6.1A, 4.16.1.6.1A, 4.16.1.6.1B, 4.16.1.6.1C, 4.16.4.6.1A, 4.16.4.6.1B, and 4.16.4.6.1C will help reduce project-related GHG emissions and therefore make it more consistent with GHG reduction plans, policies, and/or regulations.

As previously identified, implementation of the WLC project could result in the development of an approximately 40.6 million square foot high cube-logistics distribution logistics. The project includes a variety of physical attributes and operational programs that would help reduce operational-source pollutant emissions from worker commuting, including GHG emissions. Future development that would occur under the project would be consistent with greenhouse gas emission reduction strategies and policies, including the City's Climate Change Strategy. The project would implement the Mitigation Measures listed above to reduce its contribution to GHG emissions and to ensure it does not conflict with or impede implementation of reduction goals identified in AB 32, SB 32, Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. Therefore, the project would not conflict with any applicable plan, program, policy, or regulation related to the reduction of GHG emissions. Impacts are considered less than significant.

Similar to the discussion of cumulative air quality impacts, the project may employ workers locally from the City. This has the benefit of improving the local jobs/housing balance leading to air quality benefits in terms of shorter trip lengths, which lead to lower emissions than if the workforce was derived from distant locations.

The State of California has adopted a number of policies, including AB 32, SB 32, Governor's Executive Order S-3-05, the Pavley vehicle standards, the Advanced Clean Car program, and the Mobile Source Strategy, which collectively provide the structure and commitment to address California's contribution to global climate change. Since the project is consistent with these policies, including being below the SCAQMD threshold for greenhouse gases that was structured in accordance with these State policies, the project is consistent with greenhouse gas plans, policies, and regulations and impacts are less than significant after mitigation.

Level of Impact After Mitigation. Less than significant.

NOTE TO READERS: The cumulative portion of Section 4.8 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.8 of this Revised Sections of the FEIR. All other portions of Section 4.8 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.8 means that the corresponding portion of Section 4.8 in the FEIR remains unchanged or has been deleted.

4.8 HAZARDS AND HAZARDOUS MATERIALS

NOTE TO READERS: The cumulative portion of Section 4.9 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.9 of this Revised Sections of the FEIR. All other portions of Section 4.9 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.9 means that the corresponding portion of Section 4.9 in the FEIR remains unchanged or has been deleted. The Hydrology/Water Quality Technical Memorandum is included in Appendix C.

4.9 HYDROLOGY AND WATER QUALITY

NOTE TO READERS: This portion of the Revised Sections of the FEIR sets forth those portions of Section 4.10 of the FEIR which has been revised. The cumulative portion of Section 4.10 of the FEIR has been deleted from the FEIR to allow for its reanalysis to include impacts expected from past, present and reasonably foreseeable projects. The revised cumulative analysis can be found in Section 6.10 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.10 means that the corresponding portion of Section 4.10 in the FEIR remains unchanged or has been deleted.

4.10 LAND USE AND PLANNING

In 1981–82, the State Wildlife Conservation Board purchased 15,000 acres of the Mystic Lake area as mitigation for habitat impacts associated with the construction of the State Water Project. This area was designated as the San Jacinto Wildlife Area (SJWA). In 1995, the Board acquired an additional 921 acres within the southern portion of the Moreno Highlands Specific Plan (MHSP) property to incorporate into the SJWA. Since the land use designations for the acquired property were not changed following the acquisition, they remain designated for development under the Moreno Highlands Specific Plan. This project will change the designation of the acquired properties to "Open Space."

4.10.1.5 Existing General Plan, Specific Plan and Zoning Land Use Designations Applicable to the World Logistics Center Site

The World Logistics Center site currently has a General Plan designation of Business Park/Light industrial and zoning land use designations of WLSP-LD (World Logistics Center Specific Plan – Logistics Development) and WLCSP – LL (World Logistics Center Specific Plan – Light Logistics). The zoning land use designations are shown on Figure 4.10.3 in the FEIR. Development of the site is controlled by the World Logistics Center Specific Plan which authorizes the construction and operation of 40,600,000 square feet of logistics facilities and associated infrastructure, The Specific Plan land use plan is shown on FEIR Figure 4.10.4 and in Section 3.0 of the Revised Sections of the FEIR.

4.10.1.7 Project Components

The only land use approvals currently needed for the development of the World Logistics Center site are subdivision maps, and Local Agency Formation Commission (LAFCO) action to transfer 85 acres from unincorporated Riverside County to the City of Moreno Valley and into the City' Community Services District.

4.10.5.3 Conflict with Applicable Land Use Plans, Policies or Regulations (Local)

This section has been edited to remove all references to the proposed general plan amendment, specific plan and rezoning. It should conclude that the WLC project is in full compliance with all applicable plans, policies and regulations.

NOTE TO READERS: The cumulative portion of Section 4.11 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.11 of this Revised Sections of the FEIR. All other portions of Section 4.11 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.11 means that the corresponding portion of Section 4.11 in the FEIR remains unchanged or has been deleted.

4.11 MINERAL RESOURCES

NOTE TO READERS: This portion of the Revised Sections of the FEIR replaces portions of Section 4.12 of the FEIR. Tables and figures included herein are numbered sequentially as they appear for ease of reading and do not account for any tables or figures included in the unchanged portions of Section 4.12 of the FEIR. The cumulative portion of Section 4.12 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.12 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.12 means that the corresponding portion of Section 4.12 in the FEIR remains unchanged or has been deleted.

4.12 NOISE

The Superior Court ruling requires the follow actions with regards to Noise:

"The FEIR must provide an analysis of construction noise over ambient levels; provide adequate analysis on construction noise impacts on nearby homes; address the inadequacy of mitigation measures, which fail to include performance standards or ways to reduce construction noise."

The Noise technical report is included in Appendix D.

This section of the Revised Sections of the FEIR is intended to satisfy the City's requirements for a project-specific noise impact analysis by examining construction impacts of the project on sensitive land uses adjacent to the World Logistics Center project area, noise generated by project-related traffic, and by evaluating the effectiveness of mitigation measures. This analysis includes the potential for the project to result in impacts associated with a substantial temporary and/or permanent increase in ambient noise levels in the vicinity of the project area; and exposure of people to noise levels exceeding noise standards.

The analysis contained in this section is based on the following technical study prepared for the project:

- *Noise Assessment for the World Logistic Center Specific Plan,* ESA Associates, dated July 2018 (Appendix D of this Revised Sections of the FEIR).

In addition to these project-specific technical studies, the analysis contained in this section is also based on the following reference documents:

- *California Noise Insulation Standards,* California Code of Regulations, Title 24, Part 2, §3501;
- *Highway Traffic Noise Prediction Model (FHWA-RD-77-108)*, Federal Highway Administration (FHWA);
- *City of Moreno Valley General Plan*, City of Moreno Valley, July 2006;
- *Moreno Valley Municipal Code,* City of Moreno Valley, current through Ordinance 836 and the February 2012 code supplement; and
- *State of California General Plan Guidelines*, Governor's Office of Planning and Research, October 2003, pages 249 and 250.
- *Traffic Impact Analysis Report for The World Logistics Center,* WSP USA Inc., dated June 2018 (Appendix F of this Revised FEIR).

4.12.1 Existing Setting

4.12.1.1 Background

Characteristics of Noise. To the human ear, sound is technically described in terms of its loudness (amplitude) and pitch (frequency). Pitch is generally an annoyance, while loudness can affect our ability to hear. Noise is usually defined as unwanted sound; it consists of any sound that may produce

physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

Measurement of Noise. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on a logarithmic scale. The logarithmic scale compresses the wide range in sound levels resulting in a more usable range of sound level values, similar to the Richter scale used to measure earthquakes. To humans, a sound 10 dB higher than another is considered to be twice as loud; a sound 20 dB higher than another is considered four times as loud; etc. Typical daily sounds in the environmental range from 30 dB (very quiet) to 100 dB (very loud).

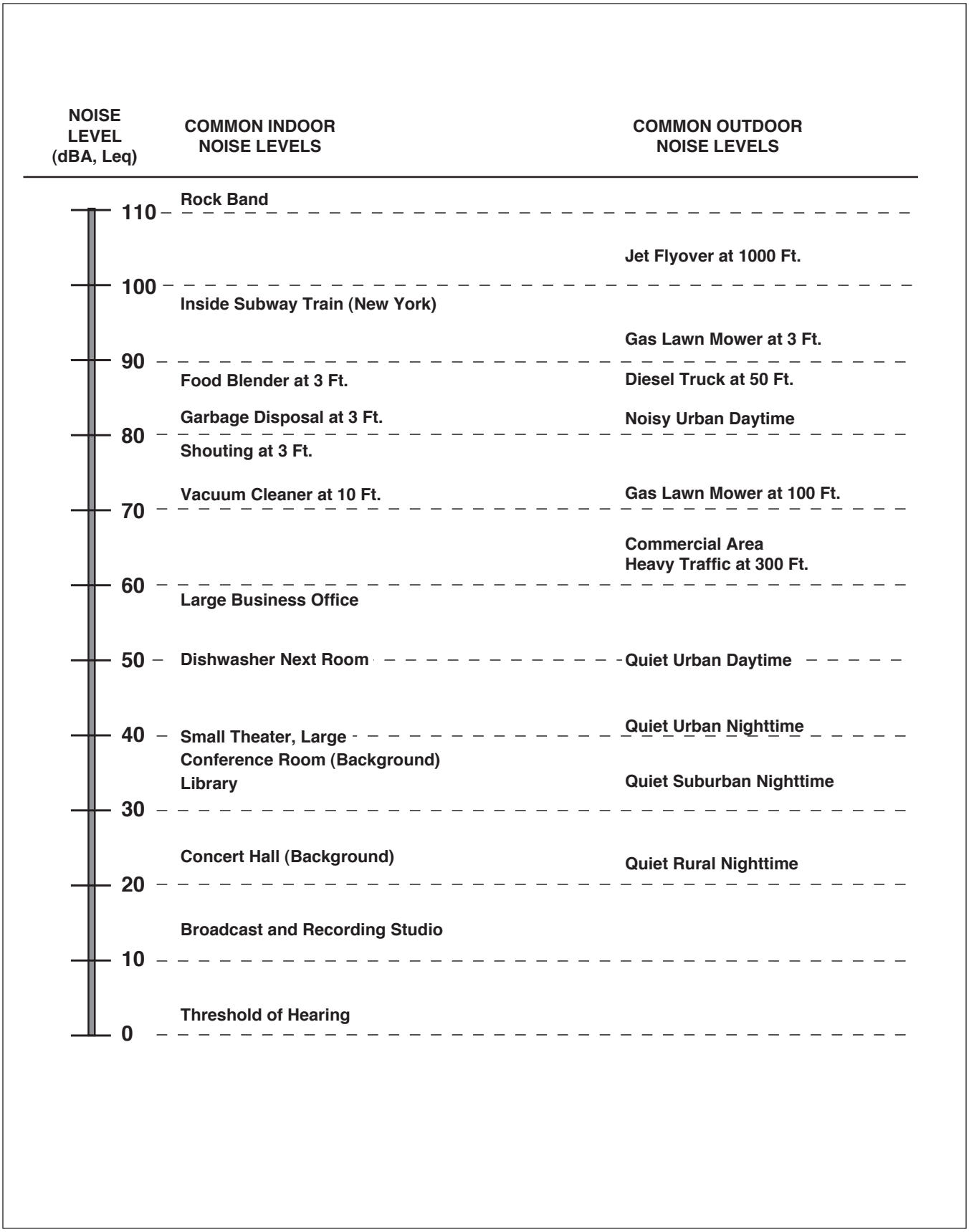
Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the dBA. Figure 4.12-1 shows examples of various noises sources and their typical dBA noise level.

There are two categories of noise that are measured to characterize noise conditions: single event noise and community or cumulative noise. Single event measurements describe the noise levels from an individual event such as a passing airplane or a heavy-duty truck. Cumulative measurements average the total noise in a community over a specific time period, which is typically 1 or 24 hours.

The noise impact analysis performed for this Revised Final EIR is based on assessment of both single event noise and community or cumulative noise. Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on humans; (2) the variety of noises found in the environment; (3) the variations in noise levels that occur as a person moves through the environment; and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to affect people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. Two of the predominant noise scales are the Equivalent Noise Level (L_{eq}) and the Community Noise Equivalent Level (CNEL). L_{eq} is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. L_{eq} is the “energy” average noise level during the time period of the sample. L_{eq} can be measured for any time period, but is typically measured for 1 hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL). It is the energy sum of all the events and background noise levels that occur during that time period.

CNEL is the predominant rating scale now in use in California for land use noise compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the dBA. Time weighted refers to the inclusion of penalties for noise that occurs during certain noise-sensitive time periods. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA, reflecting people’s increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a CNEL of 60 dBA, 60 dBA CNEL, or simply 60 CNEL.

L(%) is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example, since 5 minutes is 25 percent of 20 minutes, L(25) is the noise level that is equal to or exceeded for five minutes in a twenty-minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example, most daytime County, State and City noise ordinances use a standard of 55 dBA for 30 minutes per hour, or an L(50) level of 55 dBA. In other words, the noise ordinance may state that no noise level should exceed 55 dBA for more than fifty percent of a given period.



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SOURCE: State of California, Department of Transportation (Caltrans), Technical Noise Supplement (TeNS). October 1998. Available: http://www.dot.ca.gov/hq/env/noise/pub/Technical Noise Supplement.pdf

World Logistics Center Project

Figure 4.12-1

Typical A-weighted Noise Levels

ESA

The maximum noise level (L_{max}) is the highest exponential time averaged sound level that occurs during a stated time period. The noise levels discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak noise conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

4.12.1.2 Sensitive Land Uses in the Project Vicinity

Certain land uses are considered more sensitive to noise than others. Examples include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The World Logistics Center project vicinity and World Logistics Center site are characterized by a mix of developed and undeveloped properties. Developed properties in the vicinity include an industrial/warehouse building in Moreno Valley to the northwest (Skechers), several residential neighborhoods along Redlands Boulevard along the western boundary of the project site, and scattered residential uses along Gilman Springs Road to the east of the project site. An area of the City known as “Old Moreno” is situated near the southwest portion of the project site, around the intersection of Redlands and Alessandro Boulevards. The homes along Merwin Street, east of Redlands Boulevard, constitute the closest sensitive receptors to the project site (i.e., they are adjacent to the property). Additionally, there are currently six occupied residential uses located within the northwestern portion of the World Logistics Center site.

4.12.1.3 Existing Noise Measurements

Existing noise levels in the vicinity of the World Logistics Center project are used to establish baseline noise levels in key areas. Noise measurements within the project site and in the surrounding area were conducted. The noise measurement locations were selected to provide coverage of the project’s potential noise impact area. The noise measurement locations are shown Figure 4.12-2.

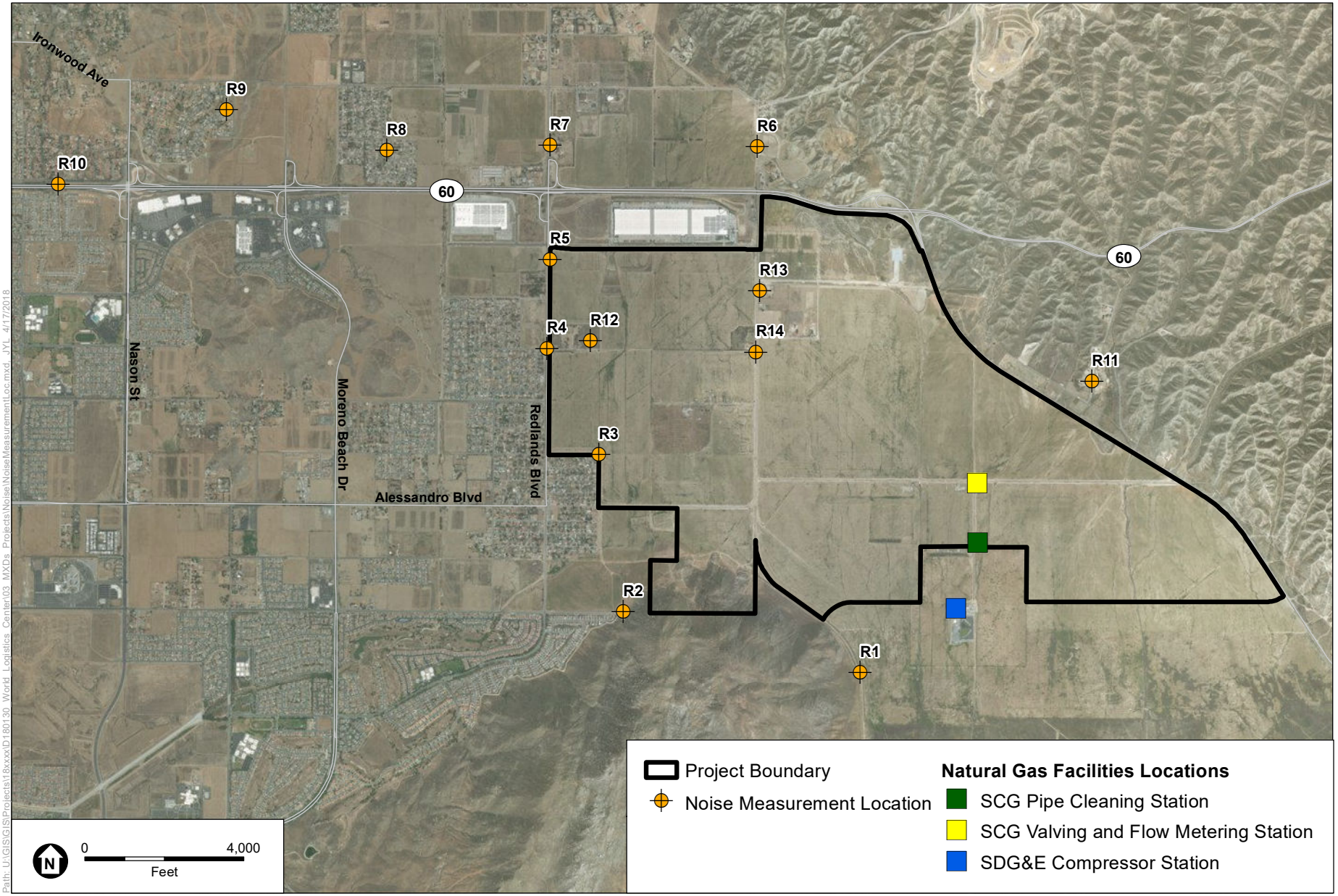
Noise measurements were conducted at 14 sites in the World Logistics Center project vicinity. Long-term (24-hour) measurements were conducted at locations R1 and R3 through R5, a 13-hour measurement was conducted at location R2, and short-term (15-minute) noise measurements were conducted at locations R6 through R14. Short-term ambient noise measurements were conducted between 8:00 A.M. to 12:00 P.M. on Thursday, March 15, 2018, and long-term ambient noise measurements were conducted from Thursday, March 15 through Friday, March 16, 2018 to characterize the existing noise environment in the project vicinity. Long-term measurements (typically 24 hours a day for several days) are used to characterize the diurnal traffic noise pattern at selected locations in the project area. This data can be used to identify the worst noise hour and to develop relationships between non-worst-hour and worst-hour noise levels. Long-term noise measurement locations were selected to represent the existing 24-hour noise environment at residential uses adjacent to the western boundary of the project site and short-term measurement locations were selected to represent each major developed area within the World Logistics Center site and serve as representative modeling locations. This information can be used to estimate worst-hour noise levels from levels measured during non-worst hour times. A summary of the noise measurements collected is provided in Table 4.12-1.

Table 4.12-1: Existing Ambient Noise Measurements (dBA L_{eq})

Site	Date	Start Time/ Measurement Period	Daytime (7 a.m. to 10 p.m.) Hourly L_{eq}	Daytime Average Hourly Leq	Nighttime (10 P.M. to 7 A.M.) Hourly Leq	Nighttime Average Hourly Leq	dBA CNEL
Off-Site Measurement Locations							
R1	3-15 to 3-16-18	8 a.m. / 24 hours	32.0 – 47.2	41.2	29.8 – 39.2	34.0	43
R2	3-15-18	9 a.m. / 13 hours	52.8 – 82.7	75.6	52.8	52.8	N/A
R3	3-15 to 3-16-18	9 a.m. / 24 hours	38.8 – 58.0	51.6	39.1 – 63.3	54.4	61
R4	3-15 to 3-16-18	11 a.m. / 24 hours	62.2 – 68.3	66.4	56.2 – 69.7	64.7	72
R5	3-15 to 3-16-18	11 a.m. / 24 hours	66.4 – 71.5	69.6	60.3 – 71.2	66.9	74
R6	3-15-18	9:16 a.m. / 15 minutes	65.4	N/A	N/A	N/A	N/A
R7	3-15-18	9:39 a.m. / 15 minutes	72.0	N/A	N/A	N/A	N/A
R8	3-15-18	10:02 a.m. / 15 minutes	53.4	N/A	N/A	N/A	N/A
R9	3-15-18	10:23 a.m. / 15 minutes	51.0	N/A	N/A	N/A	N/A
R10	3-15-18	10:44 a.m. / 15 minutes	71.7	N/A	N/A	N/A	N/A
R11	3-15-18	8:53 a.m. / 15 minutes	74.2	N/A	N/A	N/A	N/A
On-Site Measurement Locations							
R12	3-15-18	10:07 a.m. / 15 minutes	54.4	N/A	N/A	N/A	N/A
R13	3-15-18	10:32 a.m. / 15 minutes	47.0	N/A	N/A	N/A	N/A
R14	3-15-18	10:54 a.m. / 15 minutes	50.7	N/A	N/A	N/A	N/A

4.12.1.4 Existing Traffic Noise Environment

The primary existing noise sources in the World Logistics Center project area are transportation facilities. Traffic on SR-60, Redlands Boulevard, Theodore Street, World Logistics Center Parkway, Gilman Springs Road, and other local streets is the dominant source contributing to the ambient noise levels in the project vicinity. Noise from motor vehicles is generated by engine vibrations, the interaction between the tires and the road, and the exhaust system. Table 4.12-2 identifies the existing (2018) traffic noise levels adjacent to roadway segments in the project vicinity without consideration of existing noise barriers.



SOURCE: ESRI

World Logistics Center

Figure 4.12-2

Noise Measurement Locations

ESA

Table 4.12-2: Existing Traffic Noise Levels (CNEL dBA)

Roadway Segment	CNEL (dBA) at 100 feet
Alessandro Boulevard (Lasselle Street and Morrison Street)	65.3
Alessandro Boulevard (Morrison Street to Nason Street)	66.1
Alessandro Boulevard (Nason Street to Oliver Street)	64.5
Cactus Avenue (Nason Street to Oliver Street)	64.0
Cactus Avenue (Oliver Street to Moreno Beach Drive)	63.2
Cactus Avenue (Redlands Boulevard to Street D/Cactus Avenue Extension)	51.9
Cactus Avenue (west of Redlands Boulevard)	60.2
Canyon Crest Drive (Alessandro Boulevard to Sandtrack Road)	49.0
Canyon Crest Drive (Central Avenue to Country Club Drive)	67.8
Country Club Drive (Chicago Avenue to Canyon Crest Drive)	55.4
Crescent Avenue (west of Alessandro Road)	56.2
Day Street (Cottonwood Avenue to Alessandro Boulevard)	59.5
Elsworth Street (Cottonwood Avenue to Alessandro Boulevard)	58.6
Evans Road (Marbella Gate to Ramona Expressway)	68.2
Gilman Springs Road (Bridge Street to Beaumont Avenue)	67.4
Gilman Springs Road (Bridge Street to SR-79 Southbound Ramps)	67.2
Gilman Springs Road (Eucalyptus Avenue to Street C/Alessandro Boulevard)	67.2
Gilman Springs Road (Jack Rabbit Trail to Bridge Street)	67.8
Gilman Springs Road (south of Street C/Alessandro Boulevard)	68.0
Gilman Springs Road (SR-79 Northbound Ramps to Record Road)	66.5
Heacock Street (Alessandro Boulevard to Cactus Avenue)	66.3
Heacock Street (Cactus Avenue to John F Kennedy Drive)	69.2
Indian Street (Alessandro Boulevard to Cactus Avenue)	65.0
Indian Street (Cactus Avenue to John F Kennedy Drive)	65.4
Iris Avenue (Kitching Street to Lasselle Street)	67.7
Iris Avenue (Lasselle Street to Nason Street)	68.6
Iris Avenue (Nason Street to Oliver Street)	67.0
Iris Avenue (Perris Boulevard to Kitching Street)	67.5
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	60.4
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	50.7
John F Kennedy Drive (south of Cactus Avenue)	63.8
Kitching Street (Alessandro Boulevard to Cactus Avenue)	63.5
Kitching Street (Cactus Avenue to John F Kennedy Drive)	64.1
Kitching Street (Iris Avenue to Ivory Avenue)	64.0
Kitching Street (Krameria Avenue to Lurin Avenue)	61.9
Krameria Avenue (Perris Boulevard to Lasselle Street)	63.8
Lasselle Street (Cahuilla Drive to Krameria Avenue)	68.2
Lasselle Street (Cottonwood Avenue to Alessandro Boulevard)	64.1
Lasselle Street (Krameria Avenue to Arroyo Park Drive)	68.2
Live Oak Canyon Road (San Timoteo Canyon Road to I-10)	62.8
Lochmoor Drive (Central Avenue to Fair Isle Drive)	60.5
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	54.6
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	42.1
Mission Grove Parkway (Alessandro Boulevard to Northrop Drive)	65.2
Mission Grove Parkway (Cannon Road to Alessandro Boulevard)	59.3
Moreno Beach Drive (John F Kennedy Drive to Cactus Avenue)	65.8

Table 4.12-2: Existing Traffic Noise Levels (CNEL dBA)

Roadway Segment	CNEL (dBA) at 100 feet
Moreno Beach Drive (John F Kennedy Drive to Oliver Street)	62.7
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	54.1
Old 215 Frontage Road (Eucalyptus Avenue to Alessandro Boulevard)	65.5
Orange Avenue (Evans Road to Foothill Drive)	72.9
Perris Boulevard (Alessandro Boulevard to Cactus Avenue)	68.3
Perris Boulevard (Alessandro Boulevard to Cottonwood Avenue)	68.7
Perris Boulevard (Cactus Avenue to John F Kennedy Drive)	68.4
Perris Boulevard (Iris Avenue to Krameria Avenue)	68.6
Perris Boulevard (John F Kennedy Drive to Iris Avenue)	68.2
Perris Boulevard (Krameria Avenue to Harley Knox Boulevard)	70.0
Perris Boulevard (Krameria Avenue to Harley Knox Boulevard)	69.6
Perris Boulevard (Sunnymead Boulevard to Fir Avenue)	69.4
Ramona Expressway (Evans Road to Rider Street)	71.2
Reche Canyon Road (Keissel Road to Reche Vista Drove)	67.1
Reche Vista Drive (Heacock Street to Reche Canyon Road)	63.8
Redlands Boulevard (Ironwood Avenue to San Timoteo Canyon Road)	69.8
Redlands Boulevard (Ironwood Avenue to SR-60)	69.3
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	65.6
San Timoteo Canyon Road (Alessandro Road to Live Oak Canyon Road)	66.1
San Timoteo Canyon Road (Live Oak Canyon Road to Redlands Boulevard)	67.1
World Logistics Center Parkway (Eucalyptus Avenue to Street F)	52.6
Sunset Drive (Alessandro Road to Cameo Drive)	50.3
Sunset Drive (Crown Street to Alessandro Road)	47.4
Sycamore Canyon Boulevard (Central Avenue to College Boulevard)	64.4
Theodore Street (SR-60 to Ironwood Avenue)	59.6
Freeways	
SR-60 (Heacock Street to Perris Boulevard)	79.9
SR-60 (Moreno Beach Drive to Redlands Boulevard)	77.9
SR-60 (Perris Boulevard to Nason Street)	80.1
SR-60 (Pigeon Pass Road/Frederick Street to Heacock Street)	81.2
SR-60 (Redlands Boulevard to World Logistics Center Parkway, South of SR 60)	77.0

Source: ESA, 2018.

4.12.2 Existing Policies and Regulations

The applicable noise standards governing the World Logistics Center site are the criteria in the City of Moreno Valley General Plan Safety Element (Environmental Safety, Noise) and Municipal Code (Noise Ordinance). The City's Safety Element of the General Plan does not contain specific noise standards or significance thresholds. However, the General Plan does cite applicable State standards including the California Administrative Code, Section 1092 of Title 25, Chapter 1, Subchapter 1, Article 4 and Section 5014 of Title 21, Subchapter 6, Article 2. In addition, other applicable standards identified in the California Code of Regulations, Title 24, Part 2, Section 3501, the *California Noise Insulation Standards* and the *State of California Vehicular Code* (Governor's Office of Planning and Research, 2003). The following sections list the City of Moreno Valley General Plan policies, City of Moreno Valley Municipal Code, and State standards relevant to noise for the project. Construction- and traffic-related noise could potentially impact uses in neighboring jurisdictions. Therefore, General Plan goals and policies and Noise Ordinance standards for the City of Perris, City of Riverside, and County of Riverside have also been included herein.

4.12.2.1 City of Moreno Valley General Plan Policies

Chapter 9 of the *City of Moreno Valley General Plan* (COMV, 2006g) defines goals, objectives, policies, and action items related to noise conditions in the City. The specific policies related to noise that are relevant to the project are as follows:

Objective 6.3 Provide noise compatible land use relationships by establishing noise standards utilized for design and siting purposes.

Policy 6.3.5 Enforce the California Administrative Code, Title 24 noise insulation standards for new multi-family housing developments, motels and hotels.

Policy 6.3.6 Building shall be limited in areas of sensitive receptors.

Objective 6.4 Review noise issues during the planning process and require noise attenuation measures to minimize acoustic impacts to existing and future surrounding land uses.

Policy 6.4.1 Site, landscape and architectural design features shall be encouraged to mitigate noise impacts for new developments, with a preference for noise barriers that avoid freeway sound barrier walls.

Objective 6.5 Minimize noise impacts from significant noise generators such as, but not limited to, motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities.

Policy 6.5.1 New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses.

Policy 6.5.2 Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.

4.12.2.2 City of Moreno Valley Municipal Code

The *Moreno Valley Municipal Code* (COMV, 2018) establishes a Noise Ordinance that describes the noise standards within the City. Chapter 11.80.030 (Title 11) lists specific prohibited acts.

The City's Municipal Code, Section 6.04.030.J states that "to create, allow or maintain any loud or unusual noise or operate or maintain any device, instrument, vehicle, or machinery in such a manner as to create loud or unusual noise, cause vibrations, or unreasonable light spillage or glare which causes discomfort or annoyance to reasonable persons of normal sensitivity, or which endangers the comfort, repose, health or peace of the public or of any person using or occupying other property in the vicinity" is prohibited.

The City's Municipal Code, Section 9.10.140, specifies that all commercial and industrial uses shall be operated so that noise created by any loudspeaker, bells, gongs, buzzers, or other noise attenuation or attracting devices shall not exceed 55 dBA at any one time beyond the boundaries of the property.

Chapter 11.80.030 of the City's Municipal Code also states:

> *Based on statistics from the Center for Disease Control and Prevention and the National Institute for Occupational Safety and Health, Table 1 and Table 1-A specify sound level limits which, if exceeded, will have a high probability of producing permanent hearing loss in anyone in the area where the sound levels are being exceeded. No sound shall be permitted within the City which exceeds the parameters set forth in Table 11.80.030-1* [Table 4.12-3] *and 11.80.030-1A* [Table 4.12-4] *of this chapter.*
>
> *No person shall maintain, create, operate or cause to be operated on private property any source of sound in such a manner as to create any nonimpulsive sound which exceeds the limits set forth for the source land use category (as defined in Section 11.80.020) in Table 11.80.030-2* [Table 4.12-5] *when measured at a distance of two hundred (200) feet or more from the real property line of the source of the sound, if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property. Any source of sound in violation of this subsection shall be deemed prima facie to be a noise disturbance.*
>
> *The following uses and activities shall be exempt from the sound level regulations except the maximum sound levels provided in Tables 11.80.030-1* [Table 4.12-3] *and 11.80.030-1A* [Table 4.12-4]*:*
>
> 1. *Sounds resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of an emergency.*
> 2. *Sounds resulting from emergency work as defined in Section 11.80.020.*
> 3. *Any aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instruction used pursuant to and within the duly adopted federal air regulations; and any aircraft operating under technical difficulties in any kind of distress, under emergency orders or air traffic control, or being operated pursuant to and subsequent to the declaration of an emergency under federal air regulations.*
> 4. *All sounds coming from the normal operations of interstate motor and rail carriers, to the extent that local regulation of sound levels of such vehicles has been preempted by the Noise Control Act of 1972 (42 U.S.C. § 4901 et seq.) or other applicable federal laws or regulations.*
> 5. *Sounds from the operation of motor vehicles, to the extent they are regulated by the California Vehicle Code.*
> 6. *Any constitutionally protected noncommercial speech or expression conducted within or upon any public right-of-way, public space or other publicly owned property constituting an open or a designated public forum in compliance with any applicable reasonable time, place and manner restriction on such speech or expression or otherwise pursuant to legal authority.*
> 7. *Sounds produced at otherwise lawful and permitted city-sponsored events, organized sporting events, school assemblies, school playground activities, by permitted fireworks, and by permitted parades on public right-of-way, public space, or other publicly owned property.*
> 8. *An event for which a temporary use permit or special event permit has been issued under other provisions of this code, where the provision of Section 11.80.010 are met, the permit granted expressly grants an exemption from specific standards contained in this chapter, and the permittee and all persons under the permittee's reasonable control actually comply with all conditions of such permit. Violation of any condition of such permit related to sound or sound equipment shall be in violation of this chapter and punishable as such.*

Table 4.12-3 and Table 4.12-4 show the maximum sound levels that are permitted in the City for continuous and impulsive sounds, respectively.

Table 4.12-3: Maximum Continuous Sound Levels*

Duration Per Day Continuous Hours	Sound Level (dBA)
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110
0.25	115

* When the daily sound exposure is composed of two or more periods of sound exposure at different levels, the combined effect of all such periods shall constitute a violation of this section if the sum of the percentage of allowed period of sound exposure at each level exceeds 100 percent.

Source: COMV, 2018.

Table 4.12-4: Maximum Impulsive Sound Levels

Number of Repetitions Per 24-Hour Period	Sound Level (dBA)
1	145
10	135
100	125

Source: Chapter 11.80.030 Table 11.80.030-1A, City of Moreno Valley Municipal Code, City of Moreno Valley.

The City also restricts the sound levels for non-impulsive sound on lands designated for residential and commercial land uses during the daytime and nighttime time periods. These levels are shown in Table 4.12-5. Section 11.80.050 (3) clearly identifies the measurement as an "average" noise level, and therefore, the noise limits shown in Table 4.12-5 are interpreted as the L_{eq} noise level.

Table 4.12-5: Maximum Non-Impulsive Sound Levels (in dBA)

Residential		Commercial	
Daytime (8:00 a.m. – 10:00 p.m.)	**Nighttime (10:01 p.m. – 7:59 a.m.)**	**Daytime (8:00 a.m. – 10:00 p.m.)**	**Nighttime (10:01 p.m. – 7:59 a.m.)**
60	55	65	60

Source: COMV, 2018.

Should a noise disturbance occur during construction, the City prohibits all construction and demolition activities between the hours of 8:00 p.m. and 7:00 a.m. the day following the noise disturbance; with the exception of emergency work by public service utilities or for other work approved by the city manager or designee. A noise disturbance is defined as any sound which that disturbs a reasonable person of normal sensitivities, exceeds the sound level limits set forth in the Noise Ordinance, or is plainly audible. A noise disturbance is defined as plainly audible measured at a distance of 200 feet from the real property line of the source of the sound if the sound occurs on privately owned property, or from the source of the sound, if the sound occurs on public right-of-way, public space or other publicly owned property.

4.12.2.5 City of Perris General Plan Policies

The Noise Element of the *City of Perris General Plan* (COP, 2016) defines goals, policies, and implementation measures related to noise conditions in the City. The specific policies related to noise that are relevant to the project are as follows:

Goal II Roadway improvements compatible with existing noise-sensitive land uses.

Policy II.A Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing sensitive noise receptors.

Goal V Future non-residential land uses compatible with noise sensitive land uses.

Policy V.A New large scale commercial or industrial facilities located within 160 feet of sensitive and uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land use Compatibility Criteria.

4.12.2.6 City of Riverside General Plan Policies

The Noise Element of the *City of Riverside General Plan* (COR, 2018) defines objectives and policies related to noise conditions in the City. The specific policies related to noise that are relevant to the project are as follows:

Objective N-1 Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

Policy N-1.5 Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N-1.7 Evaluate noise impacts from roadway improvement projects by using the City's Acoustical Assessment Procedure.

Policy N-1.8 Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-4 Minimize ground transportation-related noise impacts.

Policy N-4.1 Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Policy N-4.2 Investigate and pursue innovative approaches to reducing noise from railroad sources.

Policy N-4.3 Identify and aggressively pursue funding sources to provide grade separations and sound walls along train routes as noise reduction measures.

Policy N-4.5 Use speed limit controls on local streets as appropriate to minimize vehicle traffic noise.

4.12.2.7 County of Riverside General Plan Policies

The Noise Element of the *County of Riverside General Plan* (COR, 2015) defines policies related to noise conditions in the City. The specific policies related to noise that are relevant to the project are as follows:

N.1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

N.1.2 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.

N.1.4 Determine if existing land uses will present noise compatibility issues with projects by undertaking site surveys.

N.1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

N.1.6 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.

N.1.8 Limit the maximum permitted noise levels that cross property lines and impact adjacent land uses, except when dealing with noise emissions from wind turbines.

N.2.3 Mitigate exterior and interior noises to the levels listed in Table 4.12-6 below to the extent feasible.

Table 4.12-6: Stationary Source Land Use Standards

Land Use	Interior Standards	Exterior Standards
Residential		
10:00 p.m. to 7:00 a.m.	40 L_{eq} (10 minute)	45 L_{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L_{eq} (10 minute)	65 L_{eq} (10 minute)

Source: COR, 2015.

N.3.3 Ensure compatibility between industrial development and adjacent land uses. To achieve compatibility, industrial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses.

N.3.5 Require that a noise analysis be conducted by an acoustical specialist for all proposed projects that are noise producers. Include recommendations for design mitigation if the project is to be located either within proximity of a noise-sensitive land use, or land designated for noise-sensitive land uses.

N.3.6 Discourage projects that are incapable of successfully mitigating excessive noise.

N.3.7 Encourage noise-tolerant land uses such as commercial or industrial, to locate in areas already committed to land uses that are noise-producing.

N.4.1 Prohibit facility-related noise received by any sensitive use from exceeding the following worst-case noise levels:

a. 45 dBA-10-minute Leq between 10:00 p.m. and 7:00 a.m.

b. 65 dBA-10-minute Leq between 7:00 a.m. and 10:00 p.m.

N.4.3 Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed and ensure that the recommended mitigation measures are implemented.

N.4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.

N.4.5 Encourage major stationary noise-generating sources throughout the County of Riverside to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of conditional use permits or business licenses or prior to the approval and/or issuance of new conditional use permits for said facilities.

N.4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

N.6.3 Require commercial or industrial truck delivery hours be limited when adjacent to noise-sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.

N.9.2 Ensure the inclusion of noise mitigation measures in the design of new roadway projects in the county.

N.9.3 Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.

N.9.4 Require that the loading and shipping facilities of commercial and industrial land uses, which abut residential parcels be located and designed to minimize the potential noise impacts upon residential parcels.

N.9.5 Employ noise mitigation practices when designing all future streets and highways, and when improvements occur along existing highway segments. These mitigation measures will emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.

N.12.1 Utilize natural barriers such as hills, berms, boulders, and dense vegetation to assist in noise reduction.

N.12.2 Utilize dense landscaping to effectively reduce noise. However, when there is a long initial period where the immaturity of new landscaping makes this approach only marginally effective, utilize a large number of highly dense species planted in a fairly mature state, at close intervals, in conjunction with earthen berms, setbacks, or block walls.

N.13.1 Minimize the impacts of construction noise on adjacent uses within acceptable practices.

N.13.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

N.13.4 Require that all construction equipment utilizes noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

4.12.3 Methodology

Evaluation of noise impacts associated with the project includes the following:

- Determination of the short-term construction noise impacts on on-site and off-site noise-sensitive uses;
- Determination of the long-term noise impacts, of vehicular traffic, on on-site and off-site noise-sensitive uses; and
- Determination of the required mitigation measures to reduce construction and traffic noise.

Because of the location of noise-sensitive receptors, the noise analysis evaluates the noise effects of the industrial development on the existing residential development (sensitive receptors) near the project area.

Analysis of the project's temporary construction noise effects is based on estimates of construction equipment units and duration of use consistent with the air quality analysis. The analyses accounted for attenuation of noise levels due to distances that would be between the construction activity and the nearest sensitive land uses. Construction noise levels at nearby sensitive land uses were estimated using the FHWA's Roadway Construction Noise Model (FHWA, 2006a) assuming two of the loudest pieces of construction equipment would operate at the closest location point to the nearest sensitive receptor. Modeled construction noise levels at nearby sensitive receptors were compared to the City of Moreno Valley noise ordinance and to ambient noise levels.

The City of Moreno Valley prohibits construction from occurring outside of the hours of 8:00 p.m. to 7:00 a.m. that creates a noise disturbance. The project is anticipated to require limited nighttime construction activity, subject to the City's approval. Therefore, for this analysis, residences that are exposed to noise levels exceeding those identified in Chapter 11.80.030, Table 11.80.030-2 of the City of Moreno Valley Municipal Code (see Table 4.12-5) during project construction (60 dBA L_{eq} between 8:00 a.m. and 10:00 p.m. and 55 dBA L_{eq} between 10:01 p.m. and 7:59 a.m.) would result in violation of the City's noise ordinance.

Construction noise impacts are also assessed relative to the increase in noise levels that could result from the operation of specified construction equipment compared to existing noise level conditions. The City of Moreno Valley General Plan and noise ordinance does not specify an incremental increase threshold for construction. For this analysis, substantial temporary or periodic increases in ambient noise would occur and it would be considered a significant impact in cases where sensitive land uses are exposed to construction noise levels that increase ambient noise levels by 10 dB. A 10 dB increase in noise is considered a doubling of loudness to the average person (Caltrans, 2013).

Roadway noise impacts were evaluated using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) method (FHWA 2006b) based on the roadway traffic volume data provided in the Traffic Study prepared for the project and included in Appendix D of this Revised Final EIR. This method allows for the definition of roadway configurations, barrier information (if any), and receiver locations. Roadway noise attributable to Project development was calculated and compared to baseline noise levels that would occur under the "Without Project" condition.

4.12.4 Thresholds of Significance

A project would have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or if it would conflict with adopted environmental plans and goals of the community in which it is located.

The applicable noise standards and guidelines governing the project are those specified previously in Section 4.12.2. In summary, these criteria are contained within the Safety Element of the General Plan, the Municipal Code, the California Vehicle Code, and the State Noise Compatibility Guidelines.

For the purpose of this Revised Sections of the FEIR, a noise impact is considered significant if the project would result in:

- Construction noise would expose persons to noise levels in excess of standards established in the *City of Moreno Valley General Plan*, City of *Moreno Valley Municipal Code*, or applicable standards of other agencies; and/or
- A substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The standards within the *City of Moreno Valley General Plan* and City of *Moreno Valley Municipal Code* determine the acceptable noise environment for project and its vicinity. The standards are as follows:

- Consider the following uses noise-sensitive and discourage them in areas where exterior noise levels exceed 65 dBA CNEL unless measures are implemented that reduce the noise exposure below this level: single-family and multiple-family residential uses, group homes, hospitals, schools and other learning institutions, and parks and open space areas where quiet is a basis for use.
- Noise from construction and demolition activities exceeding those identified in Chapter 11.80.030, Table 11.80.030-2 of the City of Moreno Valley Municipal Code (60 dBA L_{eq} between 8:00 a.m. and 10:00 p.m. and 55 dBA L_{eq} between 10:01 p.m. and 7:59 a.m.) at sensitive uses during project construction would result in violation of the City's noise ordinance (see Table 4.12-5).
- Construction activity that would increase ambient noise levels at sensitive land uses by 10 dB or more would result in substantial temporary or periodic increases in ambient noise and be considered significant.

Long-term impacts from the project's traffic noise that affect existing sensitive land uses are considered to be substantial and, therefore, constitute a significant noise impact if the project would:

- Increase noise levels by 5 dB or more where the no project noise level is less than 60 CNEL;
- Increase noise level by 3 dB or more where the no project noise level is 60 CNEL to 65 CNEL; or
- Increase noise levels by 1.5 dB or more where the no project noise level is greater than 65 CNEL.

4.12.5 No Impact/Less than Significant Impacts

Section 4.12.5 of the 2015 FEIR remains unchanged.

4.12.6 Significant Impacts

4.12.6.1 Short-Term Construction Noise Impacts

Impact 4.12.6.1A: *The project could expose persons to noise levels in excess of standards established in the City of Moreno Valley General Plan, City of Moreno Valley Municipal Code, or applicable standards of other agencies.*

Threshold	Would the project result in the exposure of persons to or generation of noise levels in excess of standards established in the City of Moreno Valley General Plan, City of Moreno Valley Municipal Code, or applicable standards of other agencies?

Construction noise levels in and around the project area would fluctuate depending on the type, number, and duration of use of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving or blasting), which can be particularly disruptive. Pile driving and blasting, however, is not proposed during project construction. Table 4.12-7 shows typical noise levels produced by the types of construction equipment that would likely be used during project construction.

As previously discussed in the *Methodology* discussion in Section 4.12.3, the City of Moreno Valley Noise Ordinance prohibits construction from occurring outside of the hours of 8:00 p.m. to 7:00 a.m. that creates a noise disturbance. Construction occurring within the allowable hours of 7:00 a.m. and 8:00 p.m. would not result in the violation of the City's Noise Ordinance. For this analysis, residences that are exposed to noise levels exceeding those identified in Table 4.12-5 during daytime or nighttime project construction would result in violation of the City's Noise Ordinance.

Table 4.12-7: Reference Construction Equipment Noise Levels

Type of Equipment	L_{max}, dBA (50 Feet from Source)	Hourly L_{eq}, dBA/percent Use[1] (50 Feet from Source)
Bore/Drill Rigs	85	78/20
Cement and Mortar Mixers	85	81/40
Cranes	85	77/16
Excavators	85	81/40
Forklifts	85	78/20
Graders	85	81/40
Pavers	85	82/50
Pumps	77	74/50
Rollers	85	78/20
Dozers	85	81/40
Scrapers	85	81/40
Skid Steer Loaders	85	81/40
Tractors	84	80/40
Loaders	80	76/40
Backhoes	80	76/40
Trenchers	85	78/20

NOTES:

1. Percent used during the given time period (usually an hour – hourly L_{eq}) were obtained from the FHWA Roadway Construction Noise Model User's Guide.

SOURCE: FHWA, 2006a.

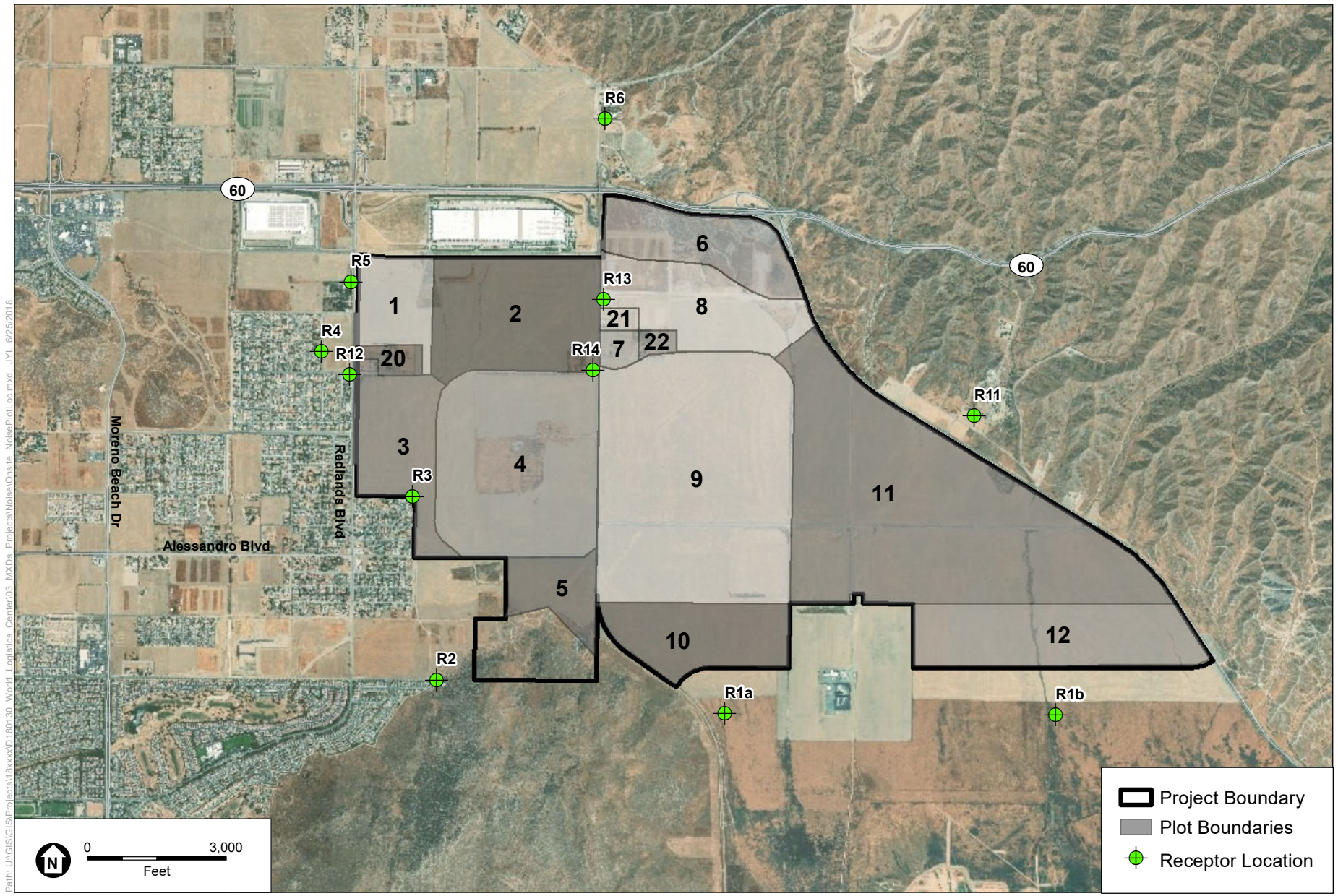
Construction operations would occur in two general areas; on-site and off-site. The on-site construction activities will be more intense. Some phases of the on-site construction are expected to occur for 24-hours a day, 7-days per week. For the purpose of this analysis, construction is anticipated to begin in 2020, periodically, for a total of 16-years. Off-site construction would be much less intense and consist of minor grading, drainage, interchange, utility and roadway improvements. Off-site construction activities would be of shorter duration and would only occur on weekdays during daytime hours. Both on-site and off-site construction are discussed in more detail below.

On-site construction activities are expected to occur outside of the allowed construction hours specified in the City of Moreno Valley Noise Ordinance. The operation of each piece of off-road equipment within the on-site construction areas (i.e., Plots 1 through 22) would not be constant throughout the day, as equipment would be turned off when not in use. Most of the time over a typical work day, the equipment would be operating at different locations within the various plots of the project site and would not likely be operating concurrently. However, for a more conservative approximation of construction noise levels to which the nearest sensitive receptor would be exposed, it is assumed that two of the loudest pieces of construction equipment would be operating at the same time and located within the project plots nearest to a sensitive receptor. The nearest sensitive receptors are the existing on-site residences, which would be located approximately 25 feet from construction activity of various Plots. As a worst case scenario, it has been assumed that all existing on-site residences will remain onsite throughout construction.

Based on the list of the construction equipment that would be used at each of the plots, it was assumed that the two loudest pieces of off-road equipment (a paver and scraper) would have a combined noise level of 85 dBA L_{eq} from a distance of 50 feet (FHWA, 2006a). Using this reference noise level and a 7.5 dB per doubling of distance attenuation rate, the noise exposure level at representative locations around the project site were calculated and presented in Table 4.12-8. The location of the modeled receptor locations is presented in Figure 4.12-3. As shown in Figure 4.12-3 and Table 4.12-8, noise generated during construction of the plots, in some cases construction of various plots occurring concurrently, would expose sensitive receptors to noise levels that would exceed the City's 60 dBA L_{eq} daytime and 55 dBA L_{eq} nighttime exterior noise standard. Specifically, impacts would occur at existing residences located within and to the west of the project area. Affected receptors are all located within City of Moreno Valley boundaries.

Based on these projections, anticipated worst-case construction noise levels would regularly be exceeded at residences within and near the project area. Based on an L_{eq} noise level of 85 dBA L_{eq} at 50 feet and an attenuation rate of 7.5 dB per doubling of distance, an observer would need to be at a distance of 500 feet from an active project construction area to experience a noise level of 60 dBA L_{eq}, or 800 feet for a noise level of 55 dBA L_{eq}. Therefore, the on-site construction of the project would result in the exposure of persons to or generation of noise levels in excess of standards established in the City of Moreno Valley Noise Ordinance would result in a significant impact.

Off-site construction activities would occur within the allowed construction hours identified in the City's Noise Ordinance and would be consistent with the City's code. The nearest sensitive receptors are located at approximately 25 feet from off-site construction areas. Based on the operation of the two loudest pieces of equipment simultaneously at 25 feet, off-site construction could expose sensitive receptors to a noise level of 93 dBA L_{eq}, which would exceed the City's allowable daytime exterior noise level of 60 dBA L_{eq}. Therefore, the off-site construction activities would result in the exposure of persons to or generation of noise levels in excess of standards established in the City of Moreno Valley Noise Ordinance would result in a significant impact.



SOURCE: ESRI

World Logistics Center

Figure 4.12-3
Onsite Plot Locations

ESA

Table 4.12-8: Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Noise Level Day/Night (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Ambient Day/Night (dB)	Mitigated Increase Over Ambient Day/Night (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)		
Plot 2								
1a	8,185	41	30	20	41	41	0	0
1b	12,584	41	25	15	41	41	0	0
2	6,885	76	32	22	76	76	0	0
3	2,670	52	42	32	52	52	0	0
4	2,260	66	44	34	66	66	0	0
5	1,575	70	48	38	70	70	0	0
6	3,000	65	41	31	65	65	0	0
11	8,325	74	29	19	74	74	0	0
12	1,700	54	47	37	55	54	1	0
13	120	47	75	65	75	65	**29**	**19**
14	25	51	93	83	93	83	**42**	**32**
Plot 4								
1a	4,580	41	36	26	42	41	1	0
1b	10,410	41	27	17	41	41	0	0
2	2,750	76	41	31	76	76	0	0
3	500	52	60	50	61	54	9	2
4	2,655	66	42	32	66	66	0	0
5	2,940	70	41	31	70	70	0	0
6	5,740	65	34	24	65	65	0	0
11	8,140	74	30	20	74	74	0	0
12	1,880	54	46	36	55	54	1	0
13	1,500	47	48	38	51	48	4	1
14	25	51	93	83	93	83	**42**	**32**

Table 4.12-8: Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Noise Level Day/Night (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Ambient Day/Night (dB)	Mitigated Increase Over Ambient Day/Night (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)		
Plot 9								
1a	3,990	41	37	27	43	41	2	0
1b	6,915	41	31	21	41	41	0	0
2	4,815	76	35	25	76	76	0	0
3	3,930	52	38	28	52	52	0	0
4	6,060	66	33	23	66	66	0	0
5	5,700	70	34	24	70	70	0	0
6	5,175	65	35	25	65	65	0	0
11	3,600	74	39	29	74	74	0	0
12	5,350	54	34	24	54	54	0	0
13	950	47	53	43	54	48	7	1
14	400	51	62	52	62	55	**12**	4
Plot 1, 3, and 20								
1a	7035 – 9915	41	34	24	42	41	1	0
1b	13530 – 15620	41	28	18	41	41	0	0
2	2745 – 7365	76	42	32	76	76	0	0
3	25 – 2670	52	93	83	93	83	**41**	**31**
4	835 – 1000	66	59	49	67	66	1	0
5	120 – 1875	70	79	69	80	73	9	2
6	5010 – 6840	65	38	28	65	65	0	0
11	11290 – 12100	74	31	21	74	74	0	0
12	150 – 730	54	74	64	74	64	**20**	**10**
13	3650 – 4230	47	42	32	48	47	1	0
14	3400 – 3775	51	43	33	52	51	1	0

Table 4.12-8: Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Noise Level Day/Night (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Ambient Day/Night (dB)	Mitigated Increase Over Ambient Day/Night (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)		
Plot 5 and 10								
1a	1030 – 3375	41	52	42	52	45	**11**	4
1b	5750 – 10100	41	34	24	42	41	1	0
2	1735 – 3790	76	47	37	76	76	0	0
3	1930 – 4740	52	46	36	53	52	1	0
4	5575 – 8270	66	35	25	66	66	0	0
5	6465 – 8810	70	34	24	70	70	0	0
6	9440 – 10480	65	31	21	65	65	0	0
11	5750 – 8765	74	35	25	74	74	0	0
12	7380 – 45800	54	31	21	54	54	0	0
13	4550 – 5570	47	38	28	48	47	1	0
14	3980 – 5130	51	39	29	51	51	0	0
Plot 7, 8, 21, and 22								
1a	7718 – 8610	41	36	26	42	41	1	0
1b	9290 – 12360	41	32	22	42	41	1	0
2	7540 – 8750	76	36	26	76	76	0	0
3	4840 – 6075	52	40	30	52	52	0	0
4	6030 – 6850	66	38	28	66	66	0	0
5	5265 – 5955	70	40	30	70	70	0	0
6	2960 – 4745	65	44	34	65	65	0	0
11	3640 – 7650	74	40	30	74	30	0	0
12	5230 – 6900	54	39	29	54	29	0	0
13	25 – 1550	47	97	87	97	87	**50**	**40**
14	200 – 1370	51	70	60	70	60	**19**	**10**

Table 4.12-8: Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Noise Level Day/Night (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Ambient Day/Night (dB)	Mitigated Increase Over Ambient Day/Night (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)		
Plot 11								
1a	4,475	41	36	26	42	41	1	0
1b	4,100	41	37	27	42	41	1	0
2	8,560	76	29	19	76	76	0	0
3	8,435	52	29	19	52	52	0	0
4	10,190	66	27	17	66	66	0	0
5	9,655	70	28	18	70	70	0	0
6	6,725	65	32	22	65	65	0	0
11	675	74	57	47	74	74	0	0
12	9,770	54	28	18	54	54	0	0
13	4,240	47	37	27	47	47	0	0
14	4,460	51	36	26	51	51	0	0
Plot 12								
1a	4,160	41	37	27	43	41	1	0
1b	1,050	41	52	42	52	45	**11**	3
2	10,250	76	27	17	76	76	0	0
3	11,110	52	26	16	52	52	0	0
4	13,920	66	24	14	66	66	0	0
5	13,960	70	24	14	70	70	0	0
6	12,400	65	25	15	65	65	0	0
11	4,000	74	37	27	74	74	0	0
12	13,130	54	25	15	54	54	0	0
13	9,330	47	28	18	47	47	0	0
14	8,540	51	29	19	51	51	0	0

Table 4.12-8: Increase Over Ambient at Nearest Sensitive Receptor During On-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Noise Level Day/Night (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Ambient Day/Night (dB)	Mitigated Increase Over Ambient Day/Night (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient Day/Night (dBA Leq)		
Plot 6								
1a	8,870	41	29	19	41	41	0	0
1b	10,300	41	27	17	41	41	0	0
2	9,975	76	28	18	76	76	0	0
3	6,730	52	32	22	52	52	0	0
4	6,515	66	32	22	66	66	0	0
5	5,435	70	34	24	70	70	0	0
6	1,610	65	47	37	65	65	0	0
11	4,340	74	37	27	74	74	0	0
12	6,100	54	33	23	54	54	0	0
13	960	47	53	43	54	49	7	1
14	2,440	51	43	33	52	51	1	0

Notes:
Bold Text = Exceed the applied 10 dB increase over ambient threshold. A 10 dB increase is considered a doubling of loudness to the average person.
1. Construction noise levels were modeled assuming two of the loudest construction equipment running at the same time and place nearest to a sensitive receptor. A distance of 25 feet was assumed between construction equipment and nearby receptors where plot boundaries abutted residential property boundaries. Construction noise levels were compared to daytime hourly Leqs obtained during a noise survey conducted in March 2018 by ESA.

2. Mitigation assumed a 10 dB reduction from a temporary noise barrier and equipment exhaust mufflers.

Source: ESA, 2018; FHWA, 2006a

Specific Plan Design Features. The WLCSP does not contain any design features that specifically address noise. Other features, such as perimeter setback requirements, will have the effect of reducing noise to certain residential areas.

Mitigation Measures. Construction of the World Logistics Center project would result in noise levels at the closest residences exceeding the maximum noise level allowed under the City's Municipal Code. The following measures would reduce short-term construction-related noise impacts associated with the proposed WLC project:

4.12.6.1A Prior to issuance of any discretionary project approvals, a Noise Reduction Compliance Plan (NRCP) shall be submitted to and approved by the City. The NRCP shall be prepared by a qualified acoustical consultant describing how noise reduction measures shall be implemented to reduce the noise exposure on sensitive receptors adjacent to onsite and offsite construction areas. The noise reduction measures shall be implemented so that construction activities do not exceed the City's daytime and nighttime average hourly noise standard of 60 dBA L_{eq} and 55 dBA L_{eq}, respectively. The construction noise reduction measures shall include, but not be limited to, the following measures:

- All construction equipment, fixed or mobile, shall be equipped with operating and maintained mufflers consistent with manufacturers' standards.
- Construction vehicles shall be prohibited from using Redlands Boulevard south of Eucalyptus Avenue to access on-site construction for all phases of development of the project.
- No construction activity shall occur within 800 feet of residences between 8 p.m. and 7 a.m. on weekdays and weekends.
- A 12-foot tall temporary construction sound barrier blocking the line-of-sight of construction activity to any residential receptor located within 800 feet of active construction areas shall be installed prior to commencement of any construction activity. The temporary sound barrier shall be constructed of plywood with a total thickness of 1.5 inches, or a sound blanket wall may be used. If sound blankets are used, they must have a Sound Transmission Class (STC) rating of 27 or greater.
- Distribute to the potentially affected residences and other sensitive receptors within 500 feet of project construction boundary a "hotline" telephone number, which shall be attended during active construction working hours, for use by the public to register complaints. The distribution shall identify a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints and institute feasible actions warranted to correct the problem. All complaints shall be logged noting date, time, complainant's name, nature of complaint, and any corrective action taken. The distribution shall also notify residents adjacent to the project site of the construction schedule. Records of any complaints and corrective action shall be stored at the site and available to the City upon request.

Level of Significance after Mitigation. Implementation of Mitigation Measure 4.12.6.1A would reduce construction noise levels at nearby sensitive receptors through implementation of a NRCP, which is expected to attenuate construction noise levels by a minimum of 10 dB. Table 4.12-8 shows mitigated construction noise levels at sensitive receptors in the vicinity of on-site construction areas. In addition, Mitigation Measure 4.12.6.1A prohibits construction activity within 800 feet of any sensitive receptor outside of the allowable hours of 7:00 a.m. to 8:00 p.m. As shown in Table 4.12-8, at distances greater than 800 feet, construction noise would not exceed the City's nighttime exterior noise standard of 55 dBA L_{eq}. Therefore, impacts would be less than significant with mitigation incorporated for nighttime construction. With regard to daytime construction, sensitive receptors located within and to the west of the project would continue to be exposed to construction noise levels that would exceed the City's daytime exterior noise standard of 60 dBA L_{eq} even with implementation of mitigation. Additionally, with

a 10 dB reduction, off-site construction activity would continue to expose the sensitive receptors at 25 feet to noise levels up to 83 dBA L_{eq}. Therefore, this would result in a significant and unavoidable impact with mitigation.

Impact 4.12.6.1B: The project could result in a substantial temporary and/or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Threshold	Would the project result in a substantial temporary and/or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The project has the potential of exposing sensitive receptors within the vicinity of on- and off-site construction areas to noise levels that could temporarily elevate the existing ambient noise level above the applied 10 dB substantial temporary increase threshold. As previously discussed in the *Methodology* discussion in Section 4.12.3, the City of Moreno Valley noise ordinance and general plan does not contain an incremental increase threshold for construction. Therefore, for purposes of this analysis, it would be considered a significant impact in cases where sensitive receptors are exposed to construction noise levels that increase ambient noise levels by 10 dB.

Construction crew commutes and the transport of construction equipment and materials to the site for the project would incrementally increase noise levels on access roads in the planning area. Using algorithms from the FHWA's TNM Technical Manual and the estimated work, vendor and haul truck volumes, project peak hour construction traffic noise levels were estimated for anticipated construction years and compared to measured daytime ambient noise levels along Redlands Boulevard and World Logistics Center Parkway, South of SR 60. The results of the modeling are shown in Table 4.12-9. As shown in Table 4.12-9, project construction traffic would not elevate existing ambient noise levels above the applied substantial temporary increase threshold of 10 dB.

As previously discussed, two of the loudest pieces of construction equipment running at the same time and place was used to model project-related construction noise levels at sensitive receptors nearest to on- and off-site construction areas. The modeled receptor locations for on- and off-site construction areas are shown in Figure 4.12-3 and Figure 4.12-4, respectively. These modeled construction noise levels were compared to ambient noise measurements conducted by ESA in March 2018 to evaluate whether project-related construction activities could elevate the existing ambient noise level above the applied 10 dB substantial temporary increase threshold. Table 4.12-8 and Table 4.12-10 compares the highest on-site and off-site, respectively, project construction-related L_{eq} noise levels to which sensitive receptors could be exposed against the applicable temporary substantial increase in ambient noise threshold.

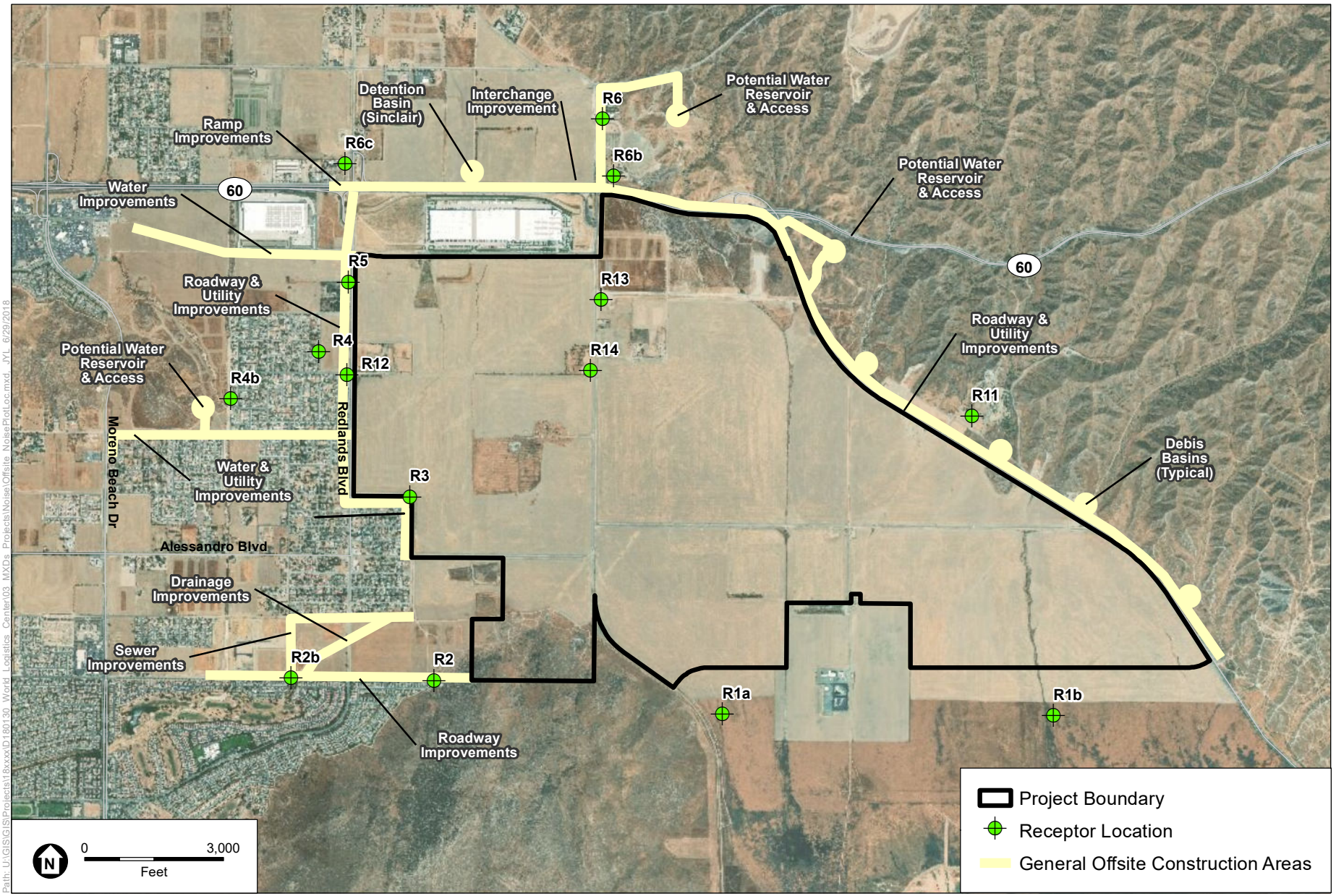
As shown in Table 4.12-8, construction activities within the project area (i.e., plots 1 through 22) would elevate existing ambient noise levels by as much as 50 dB. The existing sensitive receptors that would be most affected by on-site construction activities are located within, to the west, and to the southwest of the project area. The project-related construction activities could also have the potential to expose wildlife located within the undeveloped land located south of the project area to construction noise levels that would elevate the existing ambient to above the applied 10 dB substantial temporary increase threshold. Transient construction noise consisting of worker trips and construction equipment and materials delivery would not occur along the southern boundary of the site, adjacent to the wildlife corridor. Therefore, noise generated during onsite construction activities would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project and would result in a significant impact.

Table 4.12-9: Increase Over Ambient Along Local Roadways During Project Construction

Project Construction Year	Construction Areas	Construction On-Road Traffic Noise from 100 feet L_{eq}	Range of Existing Daytime Ambient Noise Levels along Local Roadways (dBA L_{eq})	Project Construction Noise Plus Measured Existing Noise Levels (dBA L_{eq})
2020	Plot 2	52	47 - 68	0 - 6
2021	Plot 2	54	47 - 68	0 - 8
2022	Plot 4	52	47 - 68	0 - 6
2023	Plot 4	54	47 - 68	0 - 8
2024	Plot 9	55	47 - 68	0 - 9
2025	Plot 9	54	47 - 68	0 - 8
2026	Plots 1, 3, 20	51	47 - 68	0 - 5
2027	Plots 5, 10	52	47 - 68	0 - 6
2028	Plots 5, 10	55	47 - 68	0 - 8
2029	Plots 7, 8, 21, 22	54	47 - 68	0 - 8
2030	Plot 11	55	47 - 68	0 - 8
2031	Plot 11	54	47 - 68	0 - 8
2032	Plot 11	52	47 - 68	0 - 7
2033	Plot 12	52	47 - 68	0 - 6
2034	Plot 12	54	47 - 68	0 - 8
2035	Plot 6	52	47 - 68	0 - 6

Notes:
Bold Text = Exceed the applied 10 dB increase over ambient threshold. A 10 dB increase is considered a doubling of loudness to the average person.
1. Construction traffic noise levels were modeled using estimated work, vendor and haul trips from a distance of 100 feet from center of roadway. Construction traffic noise levels were compared to daytime hourly Leqs obtained during a noise survey conducted in March 2018 by ESA.

Source: ESA, 2018



SOURCE: ESRI

World Logistics Center

Figure 4.12-4
Offsite Construction Locations

ESA

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Roadway Improvements								
1a	6,140	41	33	23	42	41	1	0
1b	13,320	41	24	14	41	41	0	0
2	25	76	93	83	93	84	**17**	8
2b	25	76	93	83	93	84	**17**	8
3	1,260	52	50	40	54	52	2	0
4a	675	66	57	47	67	66	0	0
4b	2,600	66	42	32	66	66	0	0
5	25	70	93	83	93	83	**23**	**13**
6a	4,845	65	35	25	65	65	0	0
6b	5,125	65	35	25	65	65	0	0
6c	1,860	65	46	36	65	65	0	0
11	640	74	57	47	74	74	0	0
12	25	54	93	83	93	83	**38**	**28**
13	4,220	47	37	27	47	47	0	0
14	5,000	51	35	25	51	51	0	0
Drainage Improvements								
1a	7,530	41	31	21	41	41	0	0
1b	14,560	41	23	13	41	41	0	0
2	1,680	76	47	37	76	76	0	0
2b	25	76	93	83	93	84	**17**	8
3	2,700	52	42	32	52	52	0	0
4	6,000	66	33	23	66	66	0	0
4b	5,765	66	33	23	66	66	0	0
5	7,400	70	31	21	70	70	0	0
6	11,700	65	26	16	65	65	0	0
6b	11,030	65	26	16	65	65	0	0
6c	9,810	65	28	18	65	65	0	0
11	13,400	74	24	14	74	74	0	0
12	5,313	54	34	24	54	54	0	0
13	8,230	47	30	20	47	47	0	0
14	6,890	51	32	22	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Sewer Improvements								
1a	7,000	41	31	21	41	41	0	0
1b	14,010	41	24	14	41	41	0	0
2	1,370	76	49	39	76	76	0	0
2b	25	76	93	83	93	84	**17**	8
3	2,610	52	42	32	52	52	0	0
4	6,130	66	33	23	66	66	0	0
4b	5,150	66	35	25	66	66	0	0
5	7,360	70	31	21	70	70	0	0
6	11,630	65	26	16	65	65	0	0
6b	10,525	65	27	17	65	65	0	0
6c	9,810	65	28	18	65	65	0	0
11	12,710	74	25	15	74	74	0	0
12	5,300	54	34	24	54	54	0	0
13	7,900	47	30	20	47	47	0	0
14	6,530	51	32	22	51	51	0	0
Water Utility Improvements								
1a	7,500	41	31	21	41	41	0	0
1b	14,255	41	24	14	41	41	0	0
2	2,660	76	42	32	76	76	0	0
2b	3,745	76	38	28	76	76	0	0
3	25	52	93	83	93	83	**41**	**31**
4	1,770	66	46	36	66	66	0	0
4b	2,525	66	42	32	66	66	0	0
5	3,240	70	40	30	70	70	0	0
6	8,670	65	29	19	65	65	0	0
6b	8,072	65	30	20	65	65	0	0
6c	5,800	65	33	23	65	65	0	0
11	13,500	74	24	14	74	74	0	0
12	1,275	54	50	40	56	54	1	0
13	6,170	47	33	23	47	47	0	0
14	5,380	51	34	24	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Potential Water Reservoir & Access								
1a	13,550	41	24	14	41	41	0	0
1b	20,000	41	20	10	41	41	0	0
2	8,316	76	29	19	76	76	0	0
2b	6,780	76	32	22	76	76	0	0
3	5,370	52	34	24	52	52	0	0
4	2,885	66	41	31	66	66	0	0
4b	925	66	53	43	66	66	0	0
5	4,082	70	37	27	70	70	0	0
6	10,590	65	27	17	65	65	0	0
6b	10,180	65	27	17	65	65	0	0
6c	6,120	65	33	23	65	65	0	0
11	16,900	74	22	12	74	74	0	0
12	3,420	54	39	29	54	54	0	0
13	9,100	47	28	18	47	47	0	0
14	8,690	51	29	19	51	51	0	0
Roadway & Utility Improvements								
1a	6,140	41	33	23	42	41	1	0
1b	13,320	41	24	14	41	41	0	0
2	25	76	93	83	93	84	**17**	8
2b	25	76	93	83	93	84	**17**	8
3	1,260	52	50	40	54	52	2	0
4	675	66	57	47	67	66	0	0
4b	2,600	66	42	32	66	66	0	0
5	25	70	93	83	93	83	**23**	**13**
6	4,845	65	35	25	65	65	0	0
6b	5,125	65	35	25	65	65	0	0
6c	1,860	65	46	36	65	65	0	0
11	640	74	57	47	74	74	0	0
12	25	54	93	83	93	83	**38**	**28**
13	4,220	47	37	27	47	47	0	0
14	5,000	51	35	25	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Water Improvements								
1a	12,830	41	25	15	41	41	0	0
1b	18,245	41	21	11	41	41	0	0
2	9,400	76	28	18	76	76	0	0
2b	9,230	76	28	18	76	76	0	0
3	3,690	52	38	28	52	52	0	0
4	2,045	66	45	35	66	66	0	0
4b	3,792	66	38	28	66	66	0	0
5	560	70	59	49	70	70	0	0
6	6,190	65	33	23	65	65	0	0
6b	5,840	65	33	23	65	65	0	0
6c	1,860	65	46	36	65	65	0	0
11	13,900	74	24	14	74	74	0	0
12	2,685	54	42	32	54	54	0	0
13	5,465	47	34	24	47	47	0	0
14	5,765	51	33	23	51	51	0	0
Ramp Improvements								
1a	13,760	41	24	14	41	41	0	0
1b	19,000	41	21	11	41	41	0	0
2	10,750	76	27	17	76	76	0	0
2b	10,686	76	27	17	76	76	0	0
3	6,780	52	32	22	52	52	0	0
4	3,660	66	38	28	66	66	0	0
4b	4,930	66	35	25	66	66	0	0
5	1,933	70	45	35	70	70	0	0
6	5,600	65	34	24	65	65	0	0
6b	5,570	65	34	24	65	65	0	0
6c	350	65	64	54	68	65	2	0
11	14,260	74	24	14	74	74	0	0
12	3,990	54	37	27	54	54	0	0
13	5,935	47	33	23	47	47	0	0
14	6,610	51	32	22	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Detention Basin (Sinclair)								
1a	12,900	41	25	15	41	41	0	0
1b	17,125	41	22	12	41	41	0	0
2	11,145	76	26	16	76	76	0	0
2b	11,740	76	26	16	76	76	0	0
3	7,315	52	31	21	52	52	0	0
4	5,225	66	35	25	66	66	0	0
4b	7,010	66	31	21	66	66	0	0
5	3,790	70	38	28	70	70	0	0
6	2,755	65	41	31	65	65	0	0
6b	2,880	65	41	31	65	65	0	0
6c	2,760	65	41	31	65	65	0	0
11	11,915	74	26	16	74	74	0	0
12	5,320	54	34	24	54	54	0	0
13	3,870	47	38	28	47	47	0	0
14	4,940	51	35	25	51	51	0	0
Interchange Improvement								
1a	11,750	41	26	16	41	41	0	0
1b	15,150	41	23	13	41	41	0	0
2	11,300	76	26	16	76	76	0	0
2b	12,560	76	25	15	76	76	0	0
3	7,865	52	30	20	52	52	0	0
4	6,980	66	31	21	66	66	0	0
4b	9,060	66	29	19	66	66	0	0
5	5,805	70	33	23	70	70	0	0
6	1,455	65	48	38	65	65	0	0
6b	85	65	79	69	79	70	**14**	5
6c	5,230	65	35	25	65	65	0	0
11	9,570	74	28	18	74	74	0	0
12	6,770	54	32	22	54	54	0	0
13	2,450	47	43	33	49	47	1	0
14	3,995	51	37	27	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Potential Water Reservoir & Access								
1a	12,600	41	25	15	41	41	0	0
1b	15,800	41	23	13	41	41	0	0
2	12,070	76	25	15	76	76	0	0
2b	13,300	76	24	14	76	76	0	0
3	8,635	52	29	19	52	52	0	0
4	7,310	66	31	21	66	66	0	0
4b	9,400	66	28	18	66	66	0	0
5	5,975	70	33	23	70	70	0	0
6	25	65	93	83	93	83	**27**	**17**
6b	333	65	64	54	68	65	3	0
6c	5,440	65	34	24	65	65	0	0
11	9,885	74	28	18	74	74	0	0
12	7,200	54	31	21	54	54	0	0
13	3,085	47	40	30	48	47	1	0
14	4,545	51	36	26	51	51	0	0
Potential Water Reservoir & Access								
1a	9,945	41	28	18	41	41	0	0
1b	10,880	41	27	17	41	41	0	0
2	12,365	76	25	15	76	76	0	0
2b	14,665	76	23	13	76	76	0	0
3	10,400	52	27	17	52	52	0	0
4	11,245	66	26	16	66	66	0	0
4b	13,235	66	24	14	66	66	0	0
5	10,445	70	27	17	70	70	0	0
6	5,915	65	33	23	65	65	0	0
6b	5,065	65	35	25	65	65	0	0
6c	11,300	65	26	16	65	65	0	0
11	4,300	74	37	27	74	74	0	0
12	10,775	54	27	17	54	54	0	0
13	5,100	47	35	25	47	47	0	0
14	5,635	51	34	24	51	51	0	0

Table 4.12-10: Increase Over Ambient at Nearest Sensitive Receptor During Off-Site Construction (dB)

Sensitive Receptor	Range of Distances to Nearest Plot	Existing Daytime Noise Level (dBA Leq)	Project Only		Project plus Ambient		Unmitigated Increase Over Daytime Ambient (dB)	Mitigated Increase Over Daytime Ambient (dB)
			Unmitigated Attenuated Construction Noise Level (dBA Leq)	Mitigated Attenuated Construction Noise Level (dBA Leq)	Unmitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)	Mitigated Attenuated Construction Noise Level plus Ambient (dBA Leq)		
Debris Basins (Typical)								
1a	4,280	41	37	27	43	41	2	0
1b	10,250	41	27	17	41	41	0	0
2	16,090	76	22	12	76	76	0	0
2b	19,250	76	20	10	76	76	0	0
3	10,375	52	27	17	52	52	0	0
4	12,000	66	25	15	66	66	0	0
4b	13,935	66	24	14	66	66	0	0
5	11,385	70	26	16	70	70	0	0
6	7,755	65	30	20	65	65	0	0
6b	6,890	65	32	22	65	65	0	0
6c	12,200	65	25	15	65	65	0	0
11	1,680	74	47	37	74	74	0	0
12	11,255	54	26	16	54	54	0	0
13	6,000	47	33	23	47	47	0	0
14	6,065	51	33	23	51	51	0	0

Notes:
Bold Text = Exceed the applied 10 dB increase over ambient threshold. A 10 dB increase is considered a doubling of loudness to the average person.
1. Construction noise levels were modeled assuming two of the loudest construction equipment running at the same time and place nearest to a sensitive receptor. A distance of 25 feet was assumed between construction equipment and nearby receptors where plot boundaries abutted residential property boundaries. Construction noise levels were compared to daytime hourly Leqs obtained during a noise survey conducted in March 2018 by ESA.
2. Mitigation assumed a 10 dB reduction from a temporary noise barrier and equipment exhaust mufflers.

Source: ESA, 2018; FHWA, 2006a

As shown in Table 4.12-10, off-site construction (e.g., roadway improvements, drainage improvements, etc.) in some areas, would elevate ambient noise levels by as much as 45 dB over existing ambient noise levels. The existing sensitive receptors located adjacent to Redlands Boulevard, Cactus Avenue and near the intersections of World Logistics Center Parkway, South of SR 60/Highway 60 and Redlands Boulevard/Highway 60 would be most affected by offsite construction activities. Therefore, noise generated during off-site construction activities would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project and would result in a significant impact.

Specific Plan Design Features. The WLCSP does not contain any design features that specifically address noise. Other features, such as perimeter setback requirements, will have the effect of reducing noise to certain residential areas.

Mitigation Measures. Construction activities occurring on- and off-site would expose nearby sensitive receptors to noise levels that would exceed the applied 10 dB substantial temporary increase threshold. Mitigation Measure 4.12.6.1A would reduce short-term construction-related noise impacts associated with the proposed WLC project.

Level of Significance after Mitigation. Implementation of Mitigation Measure 4.12.6.1A would reduce construction noise levels at nearby sensitive receptors through implementation of a NRCP, which is expected to attenuate construction noise levels by 10 dB and prohibit construction activities within 800 feet of residences during nighttime hours. As shown in Table 4.12-8 and Table 4.12-10, even with implementation of Mitigation Measure 4.12.6.1A, sensitive receptors located near on-site and off-site construction areas would be exposed to construction noise levels that would elevate the existing ambient noise levels above the applied 10 dB substantial temporary increase threshold. Therefore, this would result in a significant and unavoidable impact with mitigation.

4.12.6.2 Long-Term Traffic Noise Impacts

Impact 4.12.6.2: *The project could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*

Threshold	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The noise analysis for the World Logistics Center project is based on the traffic volume data contained in the revised Traffic Impact Analysis (TIA) prepared for the project (contained in its entirety as Revised Sections of the FEIR Appendix D). The TIA addressed the intersections of surface streets in Moreno Valley of a collector or higher classification street with another collector or higher classification street, at which the project will add 50 or more peak hour trips. The study area also included the main travel routes between the project and the neighboring cities of Riverside, Perris, Beaumont, San Jacinto, and Redlands. The study area extended west to the nearest ramps on SR-91 and as far south as the I-215 ramps at Redlands Avenue in Perris. The study area for freeways was selected to encompass the freeway routes radiating from the project site to the north, south, east, and west. The traffic analysis covered SR-60 from I-10 in the east to SR-71 in the west, SR-91/I-215 from I-210 in the east to I-15 in the west, I-215 from Redlands Avenue in the north to the Scott Road interchange in the south, and I-10 from SR-62 in the east to SR-60 in the west.

Three hundred and thirty-nine (339) roadway links and eighty-nine (89) freeway segments were analyzed in the noise analysis. The change in noise level was calculated for all 428 roadway and freeway links with and without the World Logistics Center project for the existing case (2018), 2025, and 2040 buildout scenarios. Segments with noise increases less than 1.5 dB would not have a substantial noise increase and were not presented in the main body of the noise report (i.e., the tables). Similarly, any segments that do not have sensitive receptors (e.g., residential uses or schools) were also not presented in the main body of the noise report. Based on this filtering process, of the 428

segments analyzed, 21 segments have sensitive receptors and an increase of 1.5 dB for at least one buildout scenario and were therefore addressed in the analysis.

The projected future traffic volumes (WSP USA, June 2018) for roadway segments in the World Logistics Center project vicinity were used in the TIA. Modeled noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. As previously identified, long-term impacts from the project's traffic noise that affect existing sensitive land uses are considered to be substantial and, therefore, constitute a significant noise impact if the project would:

- Increase noise levels by 5 dB or more where the no project noise level is less than 60 CNEL;
- Increase noise level by 3 dB or more where the no project noise level is 60 CNEL to 65 CNEL; or
- Increase noise levels by 1.5 dB or more where the no project noise level is greater than 65 CNEL.

Operation of development that could occur within the World Logistics Center project area would generate traffic along roadways in the project vicinity. Table 4.12-11 identifies existing with Project roadway traffic noise levels.

Table 4.12-11: Existing Year (2018) Plus Project Buildout Traffic Noise Levels (dBA)

Roadway Segment	CNEL (dBA) at 100 feet			
	Without Project	With Project	Change	Substantial Increase?
World Logistics Center Pkwy (Eucalyptus Avenue to Street F)	52.6	71.1	18.5	Yes
Alessandro Boulevard (Cactus Avenue Extension to World Logistics Center Pkwy)	51.9	64.4	12.5	Yes
Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue)	0.0	65.7	65.7	Yes
John F Kennedy Drive (south of Cactus Avenue)	63.8	65.7	1.9	No
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	65.6	68.4	2.8	Yes
Street F (east of World Logistics Center Parkway)	0.0	69.2	69.2	Yes
Cactus Avenue (west of Redlands Boulevard)	60.2	62.3	2.1	No
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	50.7	56.2	5.5	Yes
Theodore Street (SR-60 to Ironwood Avenue)	59.6	61.5	1.9	No
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	60.4	62.1	1.7	No
Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension)	51.9	64.4	12.5	Yes
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	42.1	47.2	5.1	Yes
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	54.6	60.3	5.7	Yes
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	54.1	57.9	3.8	No
Kitching Street (Krameria Avenue to Lurin Avenue)	61.9	65.1	3.2	Yes
Sunset Drive (Crown Street to Alessandro Road)	47.4	49.0	1.6	No
SR-60 EB Ramps (SR-60 to Central Avenue)	57.4	65.0	7.6	Yes
Freeways				
SR-60 (Perris Boulevard to Nason Street)	80.1	81.6	1.5	Yes
SR-60 (Moreno Beach Drive to Redlands Boulevard)	77.9	80.3	2.4	Yes
SR-215 (Mill Street to 2nd Street)	82.9	83.0	0.1	No
SR-215 (Baseline Road to Highland Avenue/SR-210	80.4	80.4	0.0	No

Source: ESA, 2018

As identified in Table 4.12-11, build out of the proposed WLC project under 2018 conditions would result in substantial increases in traffic noise levels in the Existing plus Project Build Out scenario case. The largest project-related increase in traffic noise would be along Cactus Avenue Extension and Street F where increases of greater than 65 dBA are predicted. However, the increases associated with these roadway segments is attributable in part to Cactus Avenue Extension and Street F being new roads that will be constructed by the project. A total of 13 road or freeway segments would result in a substantial noise increase attributable to the project, resulting in a significant impact requiring mitigation.

Year 2025 (Phase I) With and Without World Logistics Center project scenarios projected traffic volumes on roadway segments in the project vicinity were used to conduct the traffic noise modeling. The projected traffic volumes in the area were taken from the TIA prepared for the project. Table 4.12-12 identifies year 2025 Without Project and With Project traffic noise levels.

Table 4.12-12: Phase I (2025) Plus Project Traffic Noise Levels (dBA)

Roadway Segment	CNEL (dBA) at 100 feet			
	Without Project	With Project	Change	Substantial Increase?
World Logistics Center Pkwy (Eucalyptus Avenue to Street F)	52.9	69.5	16.6	Yes
Alessandro Boulevard (Cactus Avenue Extension to World Logistics Center Pkwy)	54.3	63.5	9.2	Yes
Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue)	0.0	63.9	63.9	Yes
John F Kennedy Drive (south of Cactus Avenue)	65.0	65.5	0.5	No
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	67.5	67.6	0.1	No
Street F (east of World Logistics Center Parkway)	0.0	58.1	58.1	Yes
Cactus Avenue (west of Redlands Boulevard)	60.4	61.4	1.0	No
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	51.5	54.3	2.8	No
Theodore Street (SR-60 to Ironwood Avenue)	59.3	60.5	1.2	No
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	62.1	62.1	0.0	No
Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension)	54.3	63.5	9.2	Yes
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	47.2	47.2	0.0	No
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	56.4	56.2	-0.2	No
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	55.1	55.0	-0.1	No
Kitching Street (Krameria Avenue to Lurin Avenue)	64.9	64.9	0.0	No
Sunset Drive (Crown Street to Alessandro Road)	49.0	49.0	0.0	No
SR-60 EB Ramps (SR-60 to Central Avenue)	65.2	65.5	0.3	No
Freeways				
SR-60 (Perris Boulevard to Nason Street)	80.8	81.6	0.8	No
SR-60 (Moreno Beach Drive to Redlands Boulevard)	79.2	80.4	1.2	No
SR-215 (Mill Street to 2nd Street)	83.1	83.1	0.0	No
SR-215 (Baseline Road to Highland Avenue/SR-210	80.5	80.6	0.1	No

Source: ESA, 2018

Increases in noise levels associated with Buildout Year (2040) traffic conditions on area roadways range up to 68.3 dBA. As identified in the Table 4.12-13, the greatest increase in noise levels would be along Cactus Avenue Extension and Street F (east of World Logistics Center Parkway), where increases of 66.8 dBA and 68.3 dBA, respectively, are predicted for the Buildout Year 2040 With Project scenario over the Buildout Year 2040 Without Project scenario. However, the increases associated with these roadway segments is attributable in part to Cactus Avenue Extension and Street F being new roads that will be constructed by the project. A total of eight road and freeway segments would result in a substantial noise increase attributable to the project, resulting in a significant impact requiring mitigation.

Table 4.12-13: Buildout Year (2040) Plus Project Traffic Noise Levels (dBA)

Roadway Segment	CNEL (dBA) at 100 feet			
	Without Project	With Project	Change	Substantial Increase?
World Logistics Center Pkwy (Eucalyptus Avenue to Street F)	54.2	71.0	16.8	Yes
Alessandro Boulevard (Cactus Avenue Extension to World Logistics Center Pkwy)	55.3	66.7	11.4	Yes
Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue)	0.0	66.8	66.8	Yes
John F Kennedy Drive (south of Cactus Avenue)	66.5	67.0	0.5	No
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	69.2	69.2	0.0	No
Street F (east of World Logistics Center Parkway)	0.0	68.3	68.3	Yes
Cactus Avenue (west of Redlands Boulevard)	61.0	64.9	3.9	Yes
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	55.9	58.2	2.3	No
Theodore Street (SR-60 to Ironwood Avenue)	65.3	66.0	0.7	No
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	64.4	64.6	0.2	No
Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension)	55.3	66.7	11.4	Yes
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	61.4	61.3	-0.1	No
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	60.7	60.9	0.2	No
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	62.8	63.0	0.2	No
Kitching Street (Krameria Avenue to Lurin Avenue)	68.5	68.4	-0.1	No
Sunset Drive (Crown Street to Alessandro Road)	49.0	49.0	0.0	No
SR-60 EB Ramps (SR-60 to Central Avenue)	65.5	66.5	1.0	No
Freeways				
SR-60 (Perris Boulevard to Nason Street)	81.6	82.4	0.8	No
SR-60 (Moreno Beach Drive to Redlands Boulevard)	80.5	81.6	1.1	No
SR-215 (Mill Street to 2nd Street)	82.9	84.8	1.9	Yes
SR-215 (Baseline Road to Highland Avenue/SR-210	80.4	82.1	1.7	Yes

Source: ESA, 2018

Tables 4.12-11 through 4.12-13 identify the noise increases directly caused by the project. These numbers represent the distance from the centerline of the road to the contour value shown. Note that the values given in Tables 4.12-11 through 4.12-13 do not take into account the effect of any existing noise attenuation in the form of barriers, soundwalls, or topography that may affect ambient noise levels.

It should be noted that the same noise increase occurs at all locations along a roadway link. In addition, the noise contours for the With Project scenarios cover a wider area around the local roadways than what was evaluated for existing conditions. State Route 60, however, continues to be the dominant noise source in the area.

In general, the World Logistics Center project proposes logistics uses and will not be affected by these noise increases. However, there are a few scattered residences within the project area and adjacent to the World Logistics Center site that would be affected by the proposed logistics uses.

Within the World Logistics Center Site. Six occupied noise-sensitive uses within the World Logistics Center site include residences that may remain with the implementation of the project. The Specific Plan would rezone the properties as Light Logistics, but it is anticipated that the residences may remain for some time. The Light Logistics use is not sensitive to noise. However, the existing residences, as long as they remain, must be considered sensitive land uses.

- *Street A/ World Logistics Center* Parkway, South of SR 60 *(Street B/Eucalyptus Avenue to Street F).* Three residences are located along Street A (World Logistics Center Parkway, South of SR 60) between the future Street B and Street F. These residences are anticipated to experience noise increases up to 18.5 dB due to the implementation of the project. As a result, existing noise levels at these residences will be changed significantly. Therefore, this would be a significant impact requiring mitigation.
- *Street F/Dracaea Avenue (east of Street A/* World Logistics Center Parkway, South of SR 60*).* A single residence is located east of World Logistics Center Parkway, South of SR 60 along what is currently Dracaea Avenue (future Street F). Existing conditions identify low levels of traffic noise on Dracaea Avenue. With build out of the project in year 2040, this residence would experience noise increases up to 69.2 dB during the 2018 buildout year. Therefore, this would be a significant impact requiring mitigation.

- *Street E/Dracaea Avenue (east of Redlands Boulevard).* Two residences are located along Dracaea Avenue east of Redlands Boulevard. These residences would be most affected by traffic along Redlands Boulevard between Eucalyptus Avenue and Cottonwood Avenue, where no significant noise increase has been identified. Additionally, although the alignment of future Street E is not yet known, it is not anticipated that the future Street E centerline would be located less than 100 feet from these residences. Therefore, impacts would be less than significant and no mitigation is required.

Off-Site Areas Adjacent to the World Logistics Center Site. For areas adjacent to the World Logistics Center site, 13 segments would experience a noise increase that would be greater than significance criteria specified previously. These areas are described below.

- *Street D/Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue).* Cactus Avenue Extension, as shown in the Specific Plan, will come down the western side of the World Logistics Center project parallel to Merwin Street. It then merges with Cactus Avenue traveling to the west until Redlands Boulevard. A specific alignment has not been determined for this roadway. There are approximately 14 homes that side-on to Merwin Street that could be affected by traffic on Cactus Avenue Extension. There are no soundwalls along these homes. These homes would experience noise level increases of up to 66.8 dB during the 2040 buildout year. Therefore, this would be a significant impact requiring mitigation.
- *Redlands Boulevard (from Eucalyptus Avenue to State Route 60).* There are homes located at the northwestern corner of Redlands Boulevard and Eucalyptus Avenue. The 2018 buildout scenario results in a significant noise increase of 2.8 dB. Therefore, this would be a significant impact requiring mitigation.

- *Cactus Avenue (west of Redlands Boulevard).* Existing residences are located along Cactus Avenue with rear yards facing Cactus Avenue with soundwalls located long the rear yards of the residences. The 2018 and 2040 buildout scenarios result in significant noise increases of 2.1 dB and 3.9 dB, respectively. Therefore, this would be a significant impact requiring mitigation.
- *Ironwood Avenue (between Redlands Boulevard and Highland Boulevard).* There are two single-family homes that front onto Ironwood Avenue. There are also two churches along this roadway. A significant noise increase of 5.5 dB is projected for 2018 with full project build out. Therefore, this would be a significant impact requiring mitigation.
- *Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension).* This area is occupied by a small group of single-family homes along Cactus Avenue between the future Street D/Cactus Avenue Extension and Redlands Boulevard. A significant noise increase is projected for all buildout scenarios. Currently, there is no soundwall along these homes. Therefore, this would be a significant impact requiring mitigation.
- *Locust Avenue (between Moreno Beach Drive and Smiley Boulevard).* There are three single-family homes along this roadway and they front onto the roadway. The 2018 buildout scenario results in a significant noise increase for this area. In 2018, the project will increase noise levels by 5.1 dB. Therefore, this would be a significant impact requiring mitigation.
- *Locust Avenue (between Moreno Beach Drive and Redlands Boulevard).* There are single-family homes along this roadway with front, rear, and side yards facing Locust Avenue. With project buildout in 2018, the project will increase noise levels by 5.7 dB. Therefore, this would be a significant impact requiring mitigation.
- *Kitching Street (between Krameria Avenue and Lurin Avenue).* There are single-family homes along this roadway with rear yards facing Kitching Street. Existing 6-foot high soundwalls are located along the residences and rear yard areas. Under the 2018 buildout scenario, the noise level is projected to increase by 3.2 dB. Therefore, this would be a significant impact requiring mitigation.
- *State Route 60 eastbound ramps (between SR-60 and Central Avenue).* Single-family homes are located south of SR-60 eastbound ramps. Under the project buildout scenario in year 2018, a noise level increase of 7.6 dB is anticipated. Therefore, this would be a significant impact requiring mitigation.
- *State Route 60 (from Perris Boulevard to Nason Street).* All residential areas along this stretch of freeway have soundwalls in place. The 2018 buildout scenario results in a significant noise increase of 1.5 dB. Therefore, this would be a significant impact requiring mitigation.
- *State Route 60 (from Moreno Beach Drive to Redlands Boulevard).* There are soundwalls in place for all residences in this area. The existing 2018 buildout scenario results in a significant noise increase of 2.4 dB. Therefore, this would be a significant impact requiring mitigation.
- *State Route 215 (from Mill Street to 2nd Street).* There are four residential uses located to the west of SR-215 south of 2nd Street with no soundwalls. The residential uses are set back from the freeway and are located at a lower grade than the freeway. The 2040 buildout scenario results in a significant noise increase of 1.9 dB. Therefore, this would be a significant impact requiring mitigation.
- *State Route 215 (from Baseline Road to Highland Avenue/SR-210).* There are residential uses on the west and east sides of SR-215. There are soundwalls in place along this segment of the SR-215 alignment. The 2040 buildout scenario results in a significant noise increase of 1.7 dB. Therefore, this would be a significant impact requiring mitigation.

Specific Plan Design Features. The WLCSP indicates there will be a 250-foot setback from existing housing along Redlands Boulevard. No additional design features to attenuate noise impacts are planned as part of the WLCSP.

Mitigation Measures. Construction of the proposed WLC project would result in noise levels at the closest residences within and adjacent to the WLCSP area exceeding the maximum noise level allowed under the City's Municipal Code. The following measures would reduce long-term traffic related noise impacts associated with the project:

4.12.6.2A When processing future individual buildings under the World Logistics Center Specific Plan, as part of the City's approval process, the City shall require the Applicant to take the following three actions for each building prior to approval of discretionary permits for individual plot plans for the requested development:

Action 1: Perform a building-specific noise study to ensure that the assumptions set forth in the Revised Sections of the FEIR remain valid. These procedures used to conduct these noise analyses shall be consistent with the noise analysis conducted in the Revised Sections of the FEIR and shall be used to impose building-specific mitigation on the individually-proposed buildings.

Action 2: If the building-specific analyses identify that the proposed development triggers the need for mitigation from the proposed building, including all preceding developments in the World Logistics Center site, the Applicant shall implement the appropriate level of mitigation, identified in the Revised Sections of the FEIR to reduce the identified impacts to comply with the Moreno Valley Municipal Code, which sets maximum sound levels reaching residential uses at 60 dBA Leq during the daytime hours (8:00 a.m. – 10:00 p.m.) and 55 dBA Leq during nighttime hours (10:01 p.m. – 7:59 a.m.). Prior to implementing the mitigation, the Applicant shall send letters by registered mail to all property owners and non-owner occupants of properties that would benefit from the proposed mitigation asking them to provide a position either in favor of or in opposition to the proposed noise abatement mitigation within 45 days. Each property shall be entitled to one vote on behalf of owners and one vote per dwelling on behalf of non-owner occupants.

If more than 50% of the votes from responding benefited receptors oppose the abatement, the abatement will not be considered reasonable. Additionally, for noise abatement to be located on private property, 100% of owners of property upon which the abatement is to be placed must support the proposed abatement. In the case of proposed noise abatement on private property, no response from a property owner, after three attempts by registered mail, is considered a *no* vote.

At the completion of the vote at the end of the 45-day period, the Applicant shall provide the tentative results of the vote to all property owners by registered mail. During the next 15 calendar days following the date of the mailing, property owners may change their vote. Following the 15-day period, the results of the vote will be finalized and made public.

Action 3: Upon consent from benefited receptors and property owners, the Applicant shall post a bond for the cost of the construction of the necessary mitigation as estimated by the City Engineer to ensure completion of the mitigation. The certificate of occupancy permits shall be issued upon posting of the bond or demonstration that 50% of the votes from responding benefited receptors oppose the abatement or, if the abatement is located on private property, any property owners oppose the abatement.

4.12.6.2B Prior to issuance/approval of any building permits, the centerline of Cactus Avenue Extension will be located no closer than 49 feet to the residential property lines along Merwin Street. An alternative is to locate the roadway closer to the residences and provide a soundwall along Cactus Avenue Extension. The soundwall location and height should be determined by a Registered Engineer, and the soundwall shall be designed to reduce noise levels to less than 65 CNEL at the residences. The Engineer shall provide calculations and supporting information in a report that will be required to be submitted to and approved by the City prior to issuing permits to construct the road.

4.12.6.2C Prior to the approval of any discretionary permits, cumulative impact areas shown in the WLC EIR Noise Study shall be included in the soundwall mitigation program outlined in Mitigation Measures 4.12.6.2A and 4.12.6.2D.

4.12.6.2D Prior to issuance of a building permit, the applicant shall demonstrate that the development maintains a setback with soundwall for noise attenuation at residential/warehousing interface (i.e., western and southwestern boundaries of the project site). To keep the noise levels at nearby residential areas less than typical ambient conditions, the warehousing property line shall be located a minimum of 250 feet from the residential zone boundary, and a 12-foot noise barrier shall be located along the perimeter of the property that faces any residential areas. The 12-foot noise barrier may be a soundwall, berm, or combination of the two. The height shall be measured relative to the pad of the warehouse. This requirement shall be implemented anytime residential areas are within 600 feet of the warehousing property line to insure that a noise level of 45 dBA (Leq) will not be exceeded at the residential zone. This requirement is consistent with Item 10 of Municipal Code Section 9.16.160 Business park/industrial that states, "All manufacturing and industrial uses adjacent to residential land uses shall include a setback zone and/or noise attenuation wall to reduce outside noise levels".

Level of Significance after Mitigation. *Within the WLC Site.* For areas within the World Logistics Center site, noise levels at on-site residences may exceed the noise standard with the implementation of the project. The level of significance after mitigation is provided for each of the two areas for which a significant impact has been identified.

- *Street A/* World Logistics Center Parkway *(Street B/Eucalyptus Avenue to Street F).* Three residences are located along Street A (World Logistics Center Parkway) between the future Street B and Street F. These residences are anticipated to experience noise increases up to 18.5 dB due to the implementation of the project. As a result, existing noise levels at these residences will be changed significantly. The exact alignment of the roadway is to be determined, but the homes may be roughly 100 feet from the centerline on the roadway. Two residences front onto Street A (World Logistics Center Parkway), and the driveway access would make a soundwall ineffective. The other residence is on Street A (World Logistics Center Parkway) and it is difficult to determine where an outdoor living area is for this residence. However, since it is a single residence, a soundwall would have a limited effectiveness. Since mitigation is not feasible, impacts remain significant and unavoidable.
- *Street F/Dracaea Avenue (east of Street A/* World Logistics Center Parkway*).* There is one residence in this area fronting onto the future alignment of Street F (currently Dracaea Avenue). Existing conditions identify low levels of traffic noise on Dracaea Avenue. The 65 CNEL contour is projected to lie 114 feet from the centerline of Street F and it is likely that the one residence would lie within this zone. With build out of the project, noise levels would reach as high as 68.3 CNEL, which exceeds the City's 65 CNEL threshold. Installation of a soundwall would not be effective in reducing noise levels due to the opening for the driveway. Since mitigation is not feasible, impacts remain significant and unavoidable.

Off-Site Areas Adjacent to the World Logistics Center Site. For areas adjacent to the World Logistics Center site, two areas would experience noise increases that would be mitigated to a less than significant level with implementation of **Mitigation Measures 4.12.6.2A** through **4.12.6.2D**. These areas are as follows:

- Cactus Avenue from Redlands Boulevard to Cactus Avenue Extension; and
- Cactus Avenue Extension from Alessandro Boulevard to Cactus Avenue.

  Cactus Avenue Extension, as shown in the Specific Plan, will come down the western side of the World Logistics Center site parallel to Merwin Street and roughly 1,250 feet from Merwin Street. It

then merges with Cactus Avenue traveling to the west until Redlands Boulevard. A specific alignment has not been determined for this roadway. There are approximately 14 homes that side-on to Merwin Street that could be affected by traffic on Cactus Avenue Extension. There are no soundwalls along these homes. The noise forecast for buildout year 2040 shows that the 65 CNEL contour will lie 49 feet from the centerline of Cactus Avenue Extension. If the centerline of Cactus Avenue Extension is located closer than 49 feet to the residences, then a significant impact would occur. Outdoor living spaces for homes along Merwin Street would experience noise levels greater than 65 CNEL, and this would not be consistent with City criteria. Due to the distance currently envisioned between Merwin Street and Cactus Avenue Extension, it is most likely that no soundwall will be needed. If a soundwall is needed, a preliminary estimate indicates that the soundwall along Cactus Avenue Extension would need to be roughly 2,000 feet long. The soundwall shall reduce traffic noise to 65 dBA CNEL measured at the boundary of residences along Merwin Street.

For the remaining noise impact locations adjacent to the World Logistics Center site for which significant noise impacts have been identified, mitigation measures are not feasible or will not fully reduce the impact to less than significant levels. Each location that will remain significant and unavoidable is discussed below.

- *Redlands Boulevard (Eucalyptus Avenue to State Route 60).* There are scattered homes in this area that either face Redlands Boulevard (or Shubert Street) or are on Redlands Boulevard. The 2018 buildout scenario results in a significant noise increase for this area. Homes that are scattered and front onto a street cannot be effectively mitigated with a soundwall. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *Cactus Avenue (west of Redlands Boulevard).* Existing residential uses are located along Redlands Boulevard with rear yards facing Cactus Avenue. Existing 6-foot high soundwalls are located along the rear yard areas. Soundwalls are already present on the west side of the roadway. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *Ironwood Avenue (between Redlands Boulevard and Highland Boulevard).* There are two single-family homes that front onto Ironwood Avenue. There are also two churches along this roadway. Land uses that are widely separated from one another cannot be effectively mitigated with a soundwall. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *Locust Avenue (between Moreno Beach Drive and Smiley Boulevard).* There are three single-family homes along this roadway and they front onto the roadway. Homes that are scattered and front onto a street cannot be effectively mitigated with a soundwall. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *Locust Avenue (between Moreno Beach Drive and Redlands Boulevard).* There are single-family homes along this roadway with front, rear, and side yards facing Locust Avenue. The homes located on the north side of Locust Avenue mostly front onto the roadway, making erecting a soundwall infeasible. A majority of the homes on the south side of the street either already have soundwalls in place or front onto Locust Avenue. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *Kitching Street (between Krameria Avenue and Lurin Avenue).* There are single-family homes along this roadway with rear yards facing Kitching Street. Existing soundwalls are located along the rear years. Soundwalls are already present on the west side of the roadway. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *State Route 60 eastbound ramps (between SR-60 and Central Avenue).* Single-family homes are located south of SR-60 eastbound ramps. Although Mitigation Measure 4.12.6.2A could mitigate impacts related to increases in ambient noise, the construction of mitigation on private property

not controlled by the project would be controlled by the property owner and not be guaranteed. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *State Route 60 (from Perris Boulevard to Nason Street).* Residential uses along this stretch of the freeway have soundwalls in place. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *State Route 60 (from Moreno Beach Drive to Redlands Boulevard).* Residential uses along this stretch of the freeway do not have soundwalls in place. Although Mitigation Measure 4.12.6.2A could mitigate impacts related to increases in ambient noise, the construction of mitigation on private property not controlled by the project would be controlled by the property owner and not be guaranteed. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *State Route 215 (from Mill Street to 2nd Street).* Residential uses along this stretch of the freeway do not have soundwalls in place. Although Mitigation Measure 4.12.6.2A could mitigate impacts related to increases in ambient noise, the construction of mitigation on private property not controlled by the project would be controlled by the property owner and not be guaranteed. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

- *State Route 215 (from Baseline Road to Highland Avenue/SR-210).* The freeway has soundwalls in place. Therefore, mitigation is not feasible and impacts will remain significant and unavoidable.

NOTE TO READERS: The cumulative portion of Section 4.13 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.13 of this Revised Sections of the FEIR. All other portions of Section 4.13 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.13 means that the corresponding portion of Section 4.13 in the FEIR remains unchanged or has been deleted.

4.13 POPULATION, HOUSING, AND EMPLOYMENT

NOTE TO READERS: The cumulative portion of Section 4.14 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.14 of this Revised Sections of the FEIR. All other portions of Section 4.14 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.14 means that the corresponding portion of Section 4.14 in the FEIR remains unchanged or has been deleted.

4.14 PUBLIC SERVICES AND FACILITIES

NOTE TO READERS: This portion of the Revised Sections of the FEIR Sections replaces portions of Section 4.15 of the FEIR. The cumulative portion of Section 4.15 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.15 of this Revised Sections of the FEIR. The absence of reference to a portion of Section 4.15 means that the corresponding portion of Section 4.15 in the FEIR remains unchanged or has been deleted.

Although not required by the court ruling, the Traffic and Circulation analysis has been completely updated to reflect current traffic and circulation conditions, updated cumulative projects, updated project impacts and associated mitigation measures. The project-specific portion of the updated traffic analysis has been prepared, as it is required for the revised cumulative impact assessment, which is required by the court order.

The Revised Traffic Impact Analysis (TIA) is located in Appendix F of the Revised Final EIR Sections in its entirety. The following summarizes the results of the revised TIA.

4.15 TRAFFIC AND CIRCULATION

PURPOSE OF THE TRAFFIC IMPACT ANALYSIS

The purpose of this Traffic Impact Analysis (TIA) is to fully analyze the local and regional traffic impacts of the proposed World Logistics Center (WLC) located in Moreno Valley, California. The TIA identifies the specific near-term and longer-term circulation improvements that would be required to mitigate project impacts and maintain acceptable peak hour and daily levels of service (LOS) on surface streets and freeways affected by the project. As part of this comprehensive analysis special attention was paid to analyzing truck access routes, safety issues relating to trucks, and the effects of truck traffic on traffic operations.

SCOPE OF STUDY

The study considers seven development scenarios, namely:

1) Existing baseline conditions (2018) without the WLC project

2) Existing baseline conditions plus Phase 1 (only) of the WLC project

3) Existing baseline conditions plus the Full Build-out of the WLC project

4) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2025, without the WLC project

5) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2025, plus Phase 1 (only) of the WLC project

6) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2040, including full build-out of the City of Moreno Valley General Plan, except that existing conditions remain on the site of the WLC project. The horizon year 2040 corresponds with the long-term planning horizon in the Southern California Association of Governments (SCAG) regional forecasts.

7) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2040, including full build-out of the City of Moreno Valley General Plan except for the WLC site, where full build-out of the WLC project was assumed.

2040 was selected for the horizon year because it corresponds to the horizon year used by agencies in the SCAG region for the most recent Sustainable Communities Strategy. The interim year analysis shows the Project when it is approximately half built out. 2025 was selected for the interim year based on SCAG's projection that 222 million square feet of logistics warehouses would be built in the region between 2016 and 2025[1], and the assumption that the WLC would attract approximately 10% of the regional total (around 22 million square feet). Most of the LOS analyses focused on the morning and evening peak hours because that is when capacity problems most frequently occur. An analysis was performed using daily traffic volumes to determine if the proposed circulation element amendment would achieve City LOS goals.

The study area for surface streets covered all intersections in Moreno Valley of collector or higher functional classification with another collector or higher classification street, at which the proposed project would add 50 or more peak hour trips[2]. The study area also included the main routes between the project and the neighboring communities of Riverside, Perris, Beaumont, San Jacinto, and Redlands. The study area also extended west to the nearest ramps to SR-91 and as far south as the I-215 ramps at Redlands Ave. in Perris. These limits represent the extreme range of the RIVTAM model's capacity to accurately predict real differences between the No-Project and Plus-Project scenarios. Figure 4.15-1 shows the study area for surface street intersections.

The study area for freeways was selected to encompass the freeway routes extending from the project site to the north, south, east, and west. The analysis covered SR-60 from I-10 in the east to SR-71 in the west, SR-91/I-215 from I-210 in the east to I-15 in the west, I-215 from Redlands Ave. in the north to the Scott Rd. interchange in the south, and I-10 from SR-62 in the east to SR-60 in the west. (Figure 4.15-2). These limits represent the extreme range of the RIVTAM model's capacity to accurately predict differences between No-Project and Plus-Project scenarios. In addition, the two main routes to the ports of Los Angeles and Long Beach were studied (4.15-3). For these corridors, trips from the WLC were manually added to forecasts for the No-Project scenario taken from the SCAG model[3].

Any freeway ramp where the project added 100 or more peak-hour trips was also studied. These included:

- All ramps of the SR-60/Theodore Interchange
- All ramps of the SR-60/Gilman Springs Rd. Interchange
- All ramps of the SR-60/Redlands Blvd. Interchange
- Westbound off- and eastbound on-ramps to the SR-60/Central Ave. Interchange, and
- Westbound off- and eastbound on-ramps to the SR-60/Martin Luther King Blvd. interchange.

CHANGES SINCE 2014

In 2012 an application was made to the City of Moreno Valley for the World Logistics Center (WLC), a new plan for the area that had been subject to the Moreno Highlands Specific Plan. A notice of preparation for the WLC environmental impact report (EIR) was issued in February 2012. A traffic impact analysis (TIA) was prepared as one of several technical studies in support of the EIR and submitted to the City in September 2014. The full Draft EIR, including traffic sections based on the TIA, was submitted for public comment in February 2013 and was the subject of public hearings held in

[1] See Table 3.2 in *Industrial Space in Southern California: Future Supply and Demand for Warehousing and Intermodal Facilities (Task Report 5)*, SCAG, June 2010

[2] City of Moreno Valley Traffic Impact Preparation Guide, 2007

[3] The modeling data in the SCAG model is based upon modeling information originally developed by the Southern California Association of Governments (SCAG), which has been modified by WSP. The modeling data used in this study does not necessarily reflect the official views or policies of SCAG. WSP is wholly responsible for the modeling results and the content of the documentation.

June 2015. The General Plan Amendment, zoning change, and the WLC Specific Plan, were adopted by the City Council in August 2015 and adopted again by ballot initiative in November 2015.

In the time since the 2014TIA, a number of developments have occurred that effect the forecast of traffic impacts from the WLC. These changes include:

- The most important new development was the completion in October 2016 of *High-Cube Warehouse Vehicle Trip Generation Analysis*, a major trip generation study for high-cube warehouses, the predominant form of land use in the WLC. This study was jointly sponsored by the South Coast Air Quality Management District (SCAQMD) and the National Association of Industrial and Office Properties (NAIOP), and was conducted by the Institute of Transportation Engineers (ITE). The results were incorporated into the 10th edition of ITE's *Trip Generation Manual*.

  This study replaces the multitude of earlier, smaller studies that produced conflicting results and created uncertainty regarding the amount of traffic generated by the newer, more automated type of high-cube warehouse proposed for the WLC. The 2016 study found that on average, warehouses generate fewer trips than had been assumed in the previous TIA for every analysis period (24% fewer in the AM peak period, 14% fewer in the PM peak hour, and 15% fewer on a daily basis). However, the volume of truck trips being generated in off-peak periods was higher than had been previously assumed.

- The trip generation rates for other land uses (light logistics, convenience market, etc.) were also updated to those in the 10th edition of ITE's *Trip Generation Manual*.

- The study analysis years were updated so that 2018 is used for Existing Conditions, 2025 is used for Phase 1, and 2040 is used for the Cumulative Scenarios.

- The assumptions regarding background (i.e. non-WLC) land development have been updated to reflect the Sustainable Community Strategy adopted by SCAG in 2016. The list of reasonably foreseeable projects was also updated to account for projects that have been completed or have dropped out, and for proposed projects that have been added to the pipeline.

- The assumptions regarding changes to the transportation network have been updated to reflect the Regional Transportation Plan adopted by SCAG in 2016. The existing conditions network was also updated to account for projects completed since the base year of the previous TIA (2012).

- New traffic counts were performed for all study intersections and roadway segments, and new data was collected for volumes on the study freeway segments.

- An analysis of the effect of the Project on regional vehicle-miles of travel (VMT) has been added. This analysis was done primarily to provide data needed for the air quality analysis. Readers may be aware that, as a result of Senate Bill 743 (Steinberg, 2013), CEQA analysis of traffic impacts is likely to change at some point in the future from LOS-based to VMT-based. This change will not take effect before January 1st 2020 at the earliest, so the LOS approach that is the primary focus of the current study accords with current state law. The VMT analysis is therefore included in this traffic study for informational purposes only.

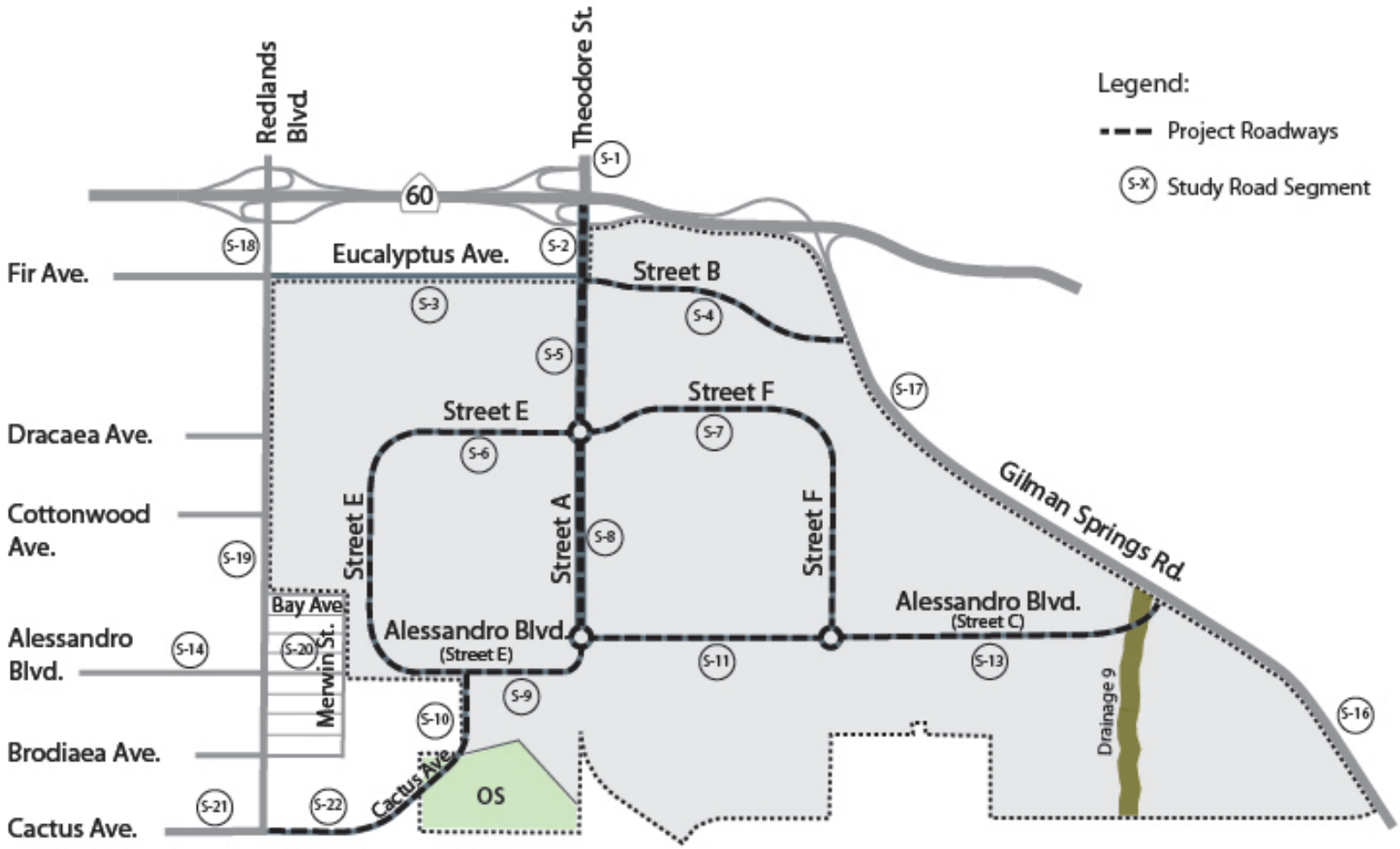


Figure 4.15-1: Study Roadway Segment Locations

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018.

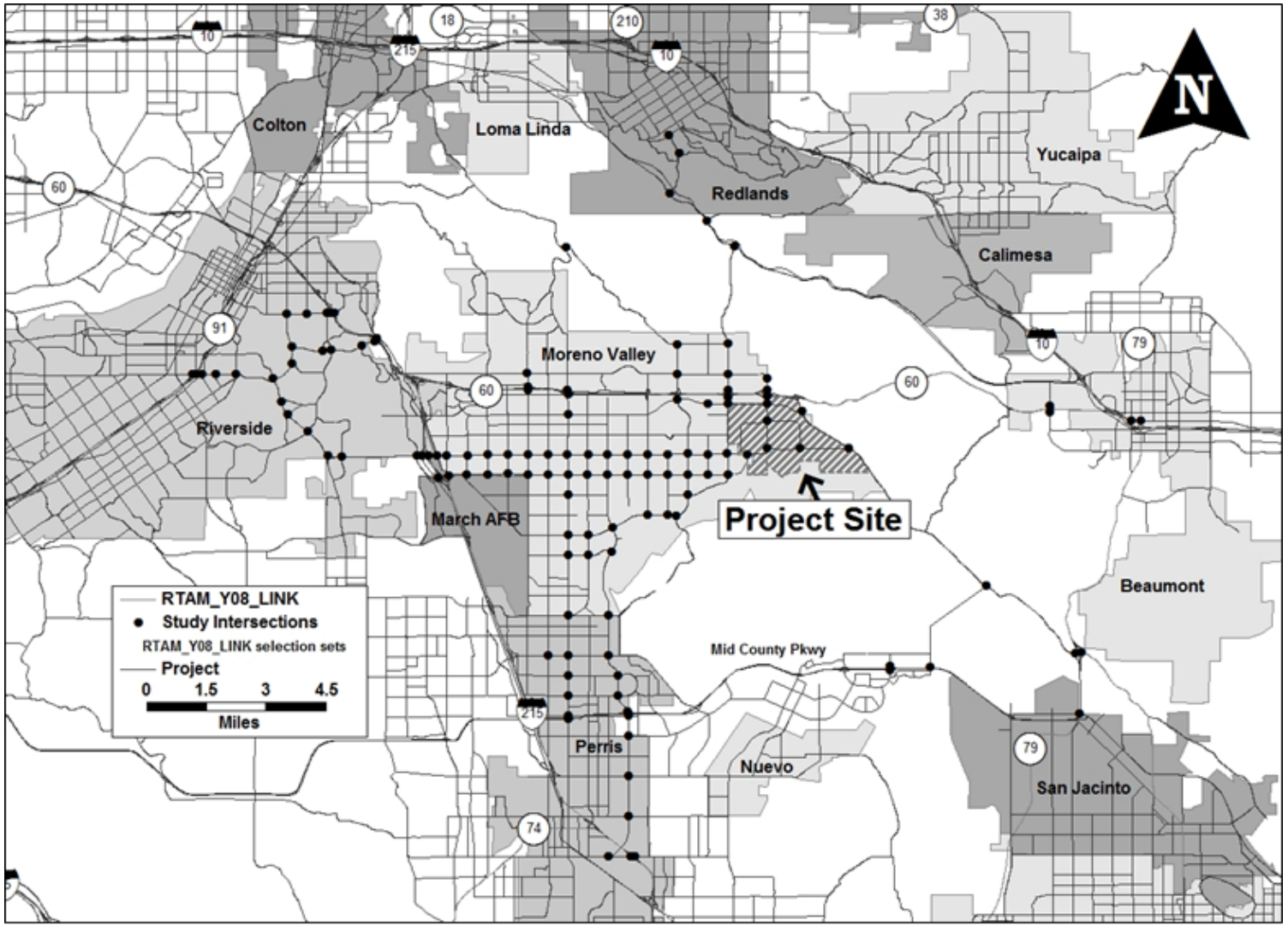


Figure 4.15-2: Study Intersection Locations
Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

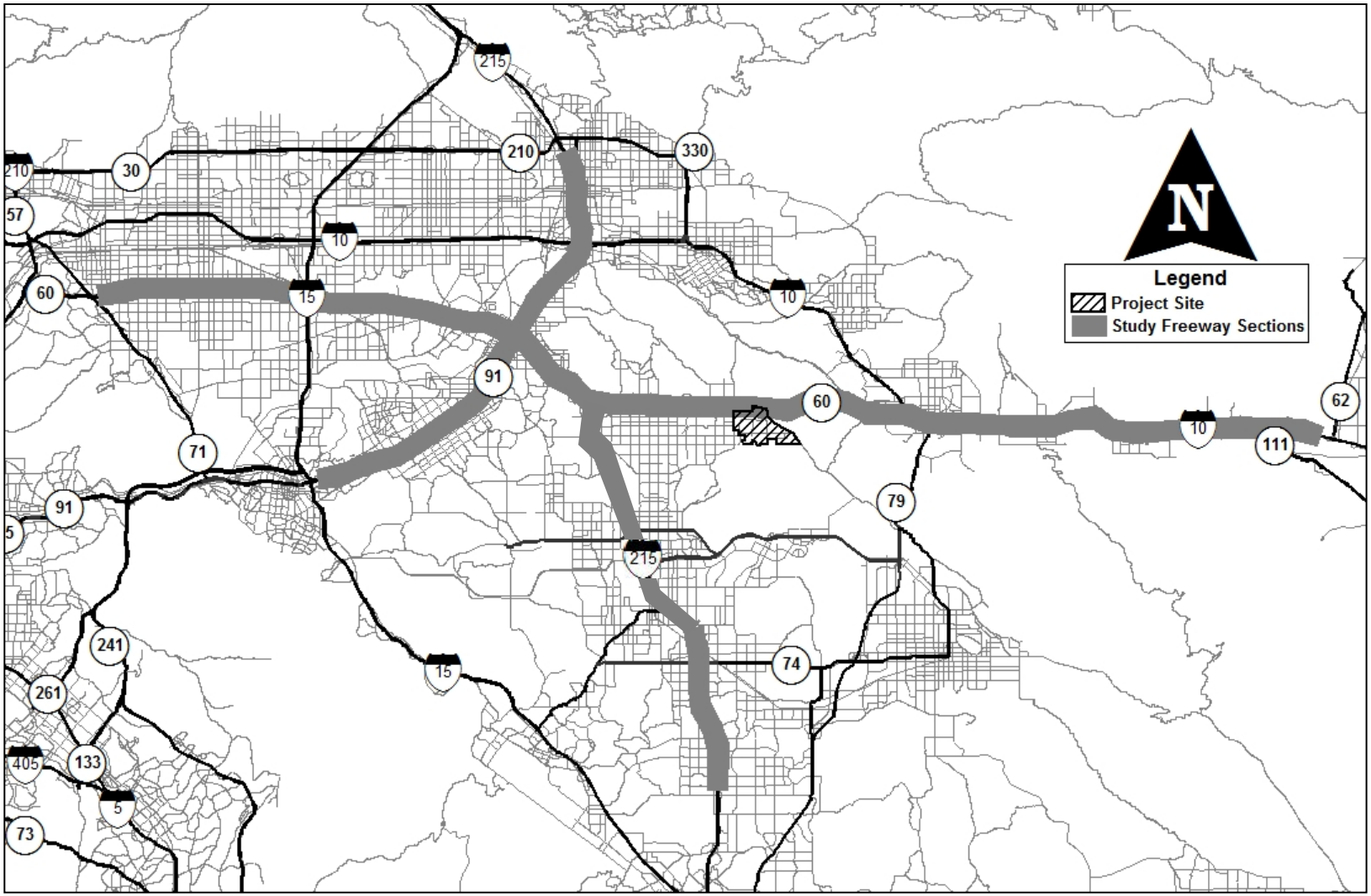


Figure 4.15-3: Freeway Segment Locations

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

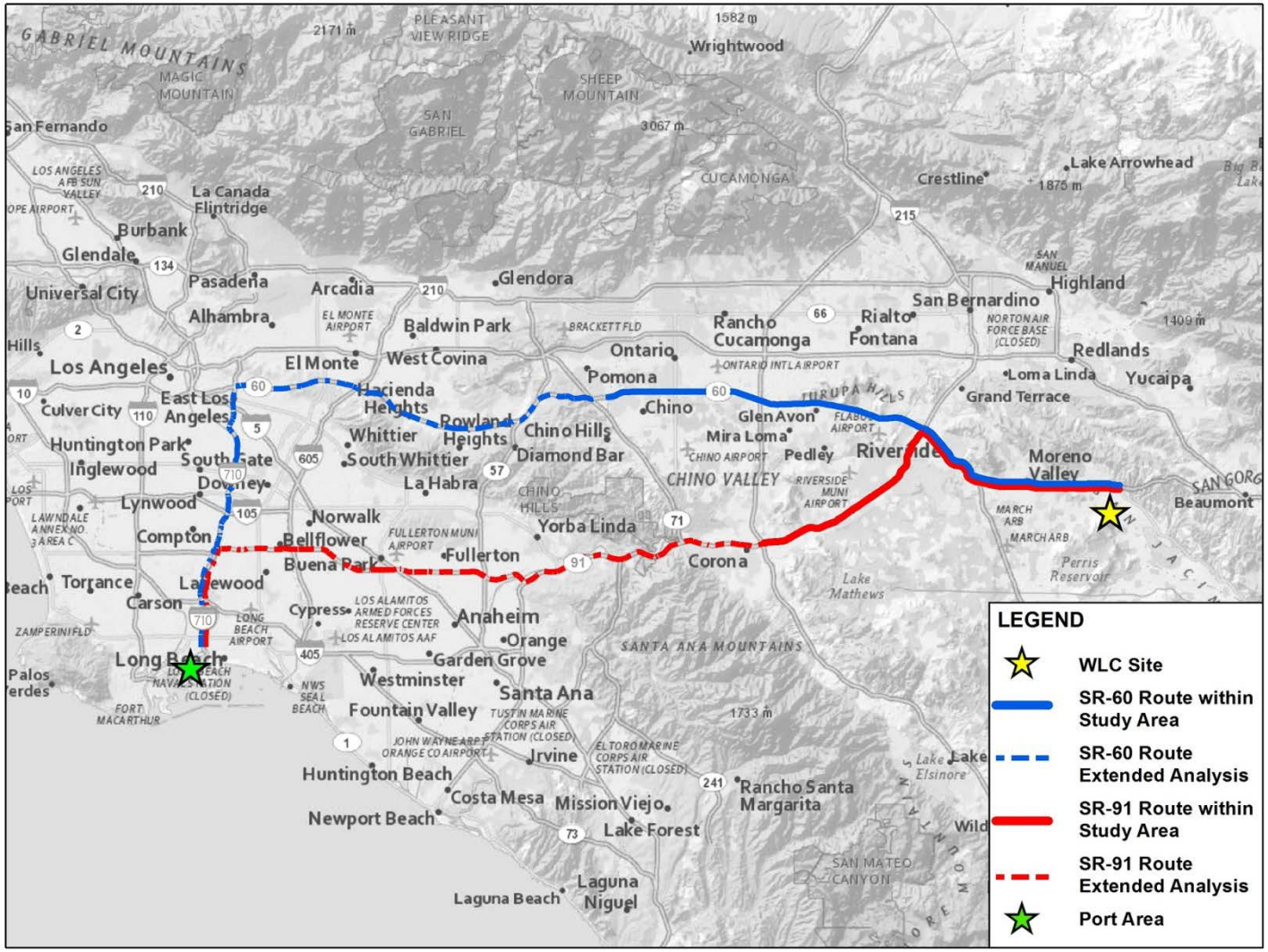


Figure 4.15-4: Freeway Segment Locations to the Ports of Los Angeles and Long Beach

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP July 2018

4.15.1 Existing Setting

4.15.1.1 Traffic Level of Service Definitions

Level of Service (LOS) is an expression of a transportation facility's operations and is dictated by the relationship between capacity and traffic volumes. LOS is generally defined using the letter grades A through F (Table 4.15-1). These levels reflect the reality that conditions rapidly deteriorate as traffic approaches the absolute capacity of a thoroughfare.

Table 4.15-1: Traffic Level of Service Definitions

Level of Service	Description
A	Volume-tocapacity ratio is low and either the progression is exceptionally favorable or the cycle length is short. If due to favorable progression, most vehicles during the green indication and travel through the intersection without stopping.
B	Volume to capacity ratio is low and either the progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A
C	Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e. one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Volume-to-capacity ratio is high and either progression is ineffective or cycle length is long. Most vehicles stop and individual cycle failures are noticeable.
E	Volume-to-capacity ratio is high, progression is unfavorable and the cycle length is long. Individual cycle failures are frequent.
F	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual, Special Report 209,* Transportation Research Board, Washington, D.C., 2010

Roadway Segment Level of Service Methodology. Roadway segment operations have been evaluated using the City of Moreno Valley Daily Roadway Capacity Values provided in the City of Moreno Valley General Plan Circulation Element as shown in Table 4.15-2.

Table 4.15-2: City of Moreno Valley Level of Service Criteria for Roadway Segments

Roadway Classification	Level of Service*				
	A	B	C	D	E
6-Lane Divided Arterial	33,900	39,400	45,000	50,600	56,300
4-Lane Divided Arterial	22,500	26,300	30,000	33,800	37,500
4-Lane Undivided Arterial	15,000	17,500	20,000	22,500	25,000
2-Lane Industrial Collector	7,500	8,800	10,000	11,300	12,500
2-Lane Undivided Residential	N/A	N/A	N/A	N/A	2,000

*Maximum Average Daily Traffic (ADT)

Source: City of Moreno Valley *Traffic Impact Analysis Preparation Guide*, 2007.

Riverside County's LOS thresholds for surface streets were used for the assessment of impacts to Gilman Springs Road, as shown in Table 4.15-3.

Table 4.15-3: Riverside County LOS Thresholds for Surface Streets

Type of Roadway	Level of Service[(1)]		
	LOS C	LOS D	LOS E
8-Lane Urban Arterial	57,400	64,600	71,800
6-Lane Urban Arterial	43,100	48,500	53,900
4-Lane Urban Arterial	28,700	32,300	35,900
2-Lane Collector	10400	11700	13,000

Notes: All capacity figures are based on optimum conditions and are intended as guidelines for planning purpose only.
(1) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.

Source: County of Riverside General Plan, Circulation Element, 2008

Intersection Level of Service Methodologies. LOS criteria for signalized intersections are identified in Table 4.15-4. Levels of service at signalized intersections were calculated using the methodology described in Chapter 16 of the *Highway Capacity Manual* (HCM) and generated by the Synchro analysis software. Signalized intersection LOS are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4.15-1.

Table 4.15-4: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection and Roundabouts Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual,* Transportation Research Board, Washington, DC, 2010

LOS criteria for unsignalized intersections are also identified in Table 4.15.D. The City of Moreno Valley requires unsignalized intersection analysis based on the methodology described in Chapter 17 of the HCM.

Freeway Level of Service Methodology. Caltrans LOS criteria for freeway mainline segments, freeway weave segments, and freeway ramp merge/diverge locations are expressed in terms of density (passenger cars/mile/lane). Table 4.15-5 shows the correlation between density and LOS for freeway segments and ramps.

Table 4.15-5: Level of Service Criteria for Freeway Segments

Level of Service	Freeway Segment Density (passenger cars/mile/lane)	Freeway Weaving Segment Density (pc/mi/lane)	Freeway Ramp Density (passenger cars/mile/lane)
A	0–11.0	≤ 10.0	≤ 10.0
B	11.0–18.0	> 10.0 and ≤ 20.0	> 10.0 and ≤ 20.0
C	18.0–26.0	> 20.0 and ≤ 28.0	> 20.0 and ≤ 28.0
D	26.0–35.0	> 28.0 and ≤ 35.0	> 28.0 and ≤ 35.0
E	35.0–45.0	>35.0 and ≤ 43.0	>35
F	> 45.0	>43.0	Exceeds Capacity

Source: (Table 11, PB 2013) *Highway Capacity Manual,* Transportation Research Board, Washington, DC, 2000.

4.15.1. Baseline Conditions

The project is located within the eastern portion of the City of Moreno Valley. The project site is located south of SR-60 and west of Gilman Springs Road. Tables 4.15.F and 4.15.G show existing intersection control types and roadway through lanes for the study area intersections and roadways, respectively. LOS and volumes are discussed below for existing (2018) without project conditions (otherwise known as the "baseline" condition).

Baseline Levels of Service. Existing (2018) traffic operations have been evaluated for study area intersections. The analysis was performed for the a.m. and p.m. peak hours. Existing traffic volumes at study area intersections are based on peak hour intersection turn movement counts. An intersection level of service analysis was conducted to determine current intersection performance for existing baseline conditions. The levels of service for existing baseline conditions at study area intersections are summarized in Table 4.15-6, which shows the following 21 study intersections currently operate at an unsatisfactory level of service during either the a.m. and p.m. peak hour:

- N-10 Redlands Blvd./Locust Ave. (AM, PM)
- IN-20 Oliver St./Alessandro Blvd. (AM)
- IN-23 Redlands Blvd./Alessandro Str. (PM)
- IN-37 Moreno Beach Dr./SR-60 EB Ramps (PM)
- IN-39 Iris Ave./Perris Blvd. (PM)
- IN-65 Perris Blvd./Cactus Ave. (AM)
- IN-83 Martin Luther King Blvd./Canyon Crest Dr. (AM)
- IN-85 Martin Luther King Blvd./I-215 NB Ramps (AM, PM)
- IN-86 Central Ave./Chicago Ave. (PM)
- IN-94 Arlington Ave./Victoria Ave. (AM)
- IN-95 Alessandro Blvd./Chicago Ave. (PM)
- IN-107 Evans Rd./Rider St. (AM)
- IN-114 Evans Rd./Orange Ave. (AM, PM)
- IN-115 Evans Rd./Nuevo Rd. (AM)
- IN-122 Bridge St./Ramona Expy. (AM, PM)
- IN-123 Gilman Springs Rd./Bridge St. (AM, PM)

- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM)
- IN-125 SR-79 (Sanderson Ave) SB/Gilman Springs Rd. (AM, PM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (AM)
- IN-133 San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- IN-134 Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

A roadway segment analysis was conducted to determine current roadway system performance for existing baseline conditions for the roadway segments that would be affected by the WLC project. Roadway segment operations have been evaluated using the City of Moreno Valley Daily Roadway Capacity Values provided in the City of Moreno Valley General Plan Circulation Element and summarized in previously referenced Table 4.15-2. The roadway segment levels of service are summarized in Table 4.15-6. The following two roadway segments currently exceed the threshold of significance established in the General Plan.

- Gilman Springs Road: Alessandro to Bridge Street
- Gliman Springs Road: SR60 to Alessandro Blvd
- Redlands Blvd: SR 60 to Eucalyptus Ave.

A freeway analysis was conducted for existing baseline conditions to determine current freeway performance on SR-60, SR-91, I-215, and I-10 basic freeway segments where the project would add 100 or more peak-hour trips and on the freeway routes to the Ports of Los Angeles and Long Beach. A freeway weaving analysis was conducted on freeway segments where an on-ramp is closely followed by an off-ramp, and the two are joined by an auxiliary lane. Existing baseline freeway mainline and weaving section levels of service are summarized in Tables 4.15-7 and 4.15-8, respectively, which show the following 34 freeway mainline segments and 7 weaving segments are currently operating at an unsatisfactory level of service during either the a.m. or p.m. peak hour:

North or Eastbound

- SR-60 Ramona Ave. to Central Ave. (AM, PM)
- SR-60 Central Ave. to Mountain Ave. (PM)
- SR-60 Mountain Ave. to Euclid Ave. (PM)
- SR-60 Euclid Ave. to Grove Ave. (PM)
- SR-60 Grove Ave. to Vineyard Ave. (PM)
- SR-60 Vineyard Ave. to Archibald Ave. (PM)
- SR-60 Market St. to Main St. (PM)
- SR-60 Martin Luther King Blvd. to Central Ave. (AM, PM)
- SR-60 Pigeon Pass Rd. to Heacock St. (PM)
- SR-91 Pierce St. to Magnolia Ave. (AM, PM)
- SR-91 Tyler St. to Van Buren Blvd. (PM)
- SR-91 Adams St. to Madison St. (AM, PM)
- SR-91 Central Ave. to 14th St. (AM, PM)
- I-215 Barton Rd. to Mt. Vernon Ave./Washington St. (AM)
- I-215 Auto Plaza Dr. to Mill St. (PM)

Southbound or Westbound

- SR-60 Grove Ave. to Vineyard Ave. (PM)
- SR-60 Vineyard Ave. to Archibald Ave. (PM)
- SR-60 Market St. to Main St. (AM)
- SR-60 Main St. to SR-91 (AM)
- SR-60 Fair Isle Dr./Box Springs Rd. to I-215 (PM)
- SR-60 I-215 to Day St. (AM)
- SR-60 Pigeon Pass Rd. to Heacock St. (AM)
- SR-91 McKinley St. to Pierce St. (AM, PM)
- SR-91 Pierce St. to Magnolia Ave. (AM, PM)
- SR-91 Magnolia Ave. to La Sierra Ave. (AM, PM)
- SR-91 La Sierra Ave. to Tyler St. (PM)
- SR-91 Tyler St. to Van Buren Blvd. (PM)
- SR-91 Van Buren Blvd. to Adams St. (PM)
- SR-91 Madison St. to Arlington Ave. (AM, PM)
- I-215 Harley Knox Blvd. to Van Buren Blvd. (PM)
- I-215 Alessandro Blvd. to Eucalyptus Ave. (PM)
- I-215 Center St. to La Cadena Dr. (AM, PM)
- I-215 La Cadena Dr. to Barton Rd. (AM, PM)
- I-215 Barton Rd. to Mt. Vernon Ave. (PM)

Most of the freeway basic sections currently exceeding the target LOS involve congestion in the peak direction. That is why regional agencies stress the importance of promoting reverse commuting; to move some traffic from the congested side of the freeway to the uncongested side.

Table 4.15-6: Existing (2018) Intersection Levels of Service

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		Non-Existent	
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		Non-Existent	
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.2	B	10.2	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		Non-Existent	
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	12.3	B	29.4	D
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	27.7	**D**	73.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	25.2	C	28.5	C
IN-12	Theodore St/Ironwood Ave	D	CSS	8.5	A	8.5	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	16.3	B	21.2	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	10.0	A	17.8	B
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.7	A	9.1	A
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.3	A	9.0	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	4	A	2.6	A
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.3	A	9.0	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	38.0	**E**	19.3	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	26.9	C	29.3	C
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	23.7	C	33.7	**D**
IN-24	Oliver St/Cactus Ave	D	SIGNAL	20.8	C	17.1	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	15.4	B
IN-26	Quincy St/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.5	B	10.6	B
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	20.5	C	18.7	B
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	31.8	C	33.4	C
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	23.2	C	20.8	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	18.8	B	13.9	B
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	25.9	C	36.3	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	16.1	B	18.5	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	19.4	B	18.5	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.4	A	8.6	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	40.1	D	41.8	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	30.7	C	61.8	**E**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	28.6	C	31.1	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	37.3	D	56.6	**E**
IN-40	Kitching St/Iris Ave	C	SIGNAL	21.7	C	17.2	B
IN-41	Lasselle St/Iris Ave	D	SIGNAL	31.2	C	34.4	C
IN-42	Nason St/Iris Ave	C	SIGNAL	16.1	B	19.4	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	20.5	C	15.0	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	11.9	B	10.7	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	27.6	C	20.7	C
IN-46	Kitching St/Krameria Ave	D	SIGNAL	19.5	B	14.6	B
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	21.8	C	19.5	B
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	24.9	C	20.0	C

Table 4.15-6: Existing (2018) Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	29.9	C	22.5	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	9.1	A	7.5	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	22.4	C	19.4	B
IN-52	Kitching St/Cactus Ave	C	SIGNAL	27.3	C	19.9	B
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	26.9	C	28.8	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	26.3	C	18.8	B
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	25.2	C	26.3	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	20.8	C	27.9	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	27.0	C	36.7	D
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	22.7	C	26.6	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	35.3	D	34.5	C
IN-61	Frederick St/Cactus Ave	D	SIGNAL	10.6	B	9.3	A
IN-62	Graham St/Cactus Ave	D	SIGNAL	20.0	C	21.0	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	40.3	D	31.8	C
IN-64	Indian St/Cactus Ave	C	SIGNAL	27.6	C	23.1	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	68.4	**E**	35.5	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	29.7	C	29.0	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.3	A	9.0	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	18.9	B	13.0	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	24.7	C	17.4	B
IN-70	Day St/Alessandro Blvd	D	SIGNAL	14.7	B	14.5	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	18.4	B	20.8	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	4.6	A	14.4	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	35.6	D	7.0	A
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	22.4	C	26.5	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	23.0	C	8.8	A
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	32.2	C	53.6	D
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	12.5	B	15.8	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	14.3	B	9.4	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	35.0	C	15.8	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	32.2	C	27.8	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	44.6	D	51.6	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	15.1	B	10.9	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	71.0	**E**	34.2	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	18.5	B	7.4	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	40.2	**E**	>180	**F**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	53.1	D	91.4	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	14.5	B	15.8	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	35.4	D	39.6	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	8.1	A	5.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.2	C	24.2	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	13.5	B	6.4	A
IN-92	Arlington Ave/Maude St	D	SIGNAL	21.5	C	27.1	C
IN-93	Horace St/Arlington Ave	D	SIGNAL	11.8	B	5.9	A
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	60.7	**E**	39.0	D
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	38.0	D	78.5	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	27.0	C	11.1	B

Table 4.15-6: Existing (2018) Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	28.9	C	22.8	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	32.8	C	34.4	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	32.1	C	29.9	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	15.4	B	20.1	C
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	36.0	D	27.9	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	55.3	E	36.1	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	7.7	A	16.7	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.3	C	21.3	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	27.6	C	22.8	C
IN-107	Evans Rd/Rider St	C	SIGNAL	41.3	**D**	28.4	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	19.2	B	11.9	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	>180	**F**	39.0	**E**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	45.8	**D**	23.8	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	43.6	**E**	111.0	**F**
IN-123	Gilman Springs Rd/Bridge St	C	CSS	75.8	**F**	84.5	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	150.8	**F**	146.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	40.9	**E**	115.4	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	43.6	D	29.7	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	17.5	B	31.4	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	12.1	B	14.0	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	18.0	B	17.5	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	55.0	**F**	23.1	C
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	85.4	**F**	104.8	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	78.0	**F**	178.9	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	13.4	B	12.5	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.1	A	9.6	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

Table 4.15-7: Existing (2018) Roadway Segment Levels of Service

	Roadway	From	To	LOS Standard*	Roadway Section**	Daily Volume	LOS
S-1	Theodore St	SR-60 WB Ramps	Ironwood Ave	D	2U	1,174	A
S-2	World Logistics Center Pkwy (A)	SR-60 EB Ramps	Eucalyptus Ave	D	2U	2,246	A
S-3	Eucalyptus Ave	Redlands Blvd	World Logistics Center Pkwy (A)	D	2U***	797	A
S-4	Eucalyptus Ave (Street B)	World Logistics Center Pkwy (A)	Gilman Springs Rd	N/A	Future Road		
S-5	World Logistics Center Pkwy (A)	Eucalyptus Ave	Street E/Street F	D	2U	1,120	A
S-6	Street E	World Logistics Center Pkwy (A)	Cactus Ave Extension	N/A	Future Road		
S-7	Street F	World Logistics Center Pkwy (A)	Alessandro Blvd (Street C)	N/A	Future Road		
S-8	World Logistics Center Pkwy (A)	Street E/Street F	Alessandro Blvd (Street C)	D	2U	1,120	A
S-9	Alessandro Blvd (Street E)	Merwin Street	World Logistics Center Pkwy (A)	D	2U	3,479	A
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave	N/A	Future Road		
S-11	Alessandro Blvd (Street C)	World Logistics Center Pkwy (A)	Street F	D	2U	2,801	A
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,801	A
S-14	Alessandro Blvd	Moreno Beach Dr	Redlands Blvd	D	2U	5,305	A
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	D	2U	22,065	**F**
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	19,394	**F**
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	D	2U	11,346	**E**
S-19	Redlands Blvd	Eucalyptus Ave	Alessandro Blvd	C	2U	8,914	C
S-20	Alessandro Blvd	Redlands Blvd	Merwin St	C	2U	5,325	A
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave	C	2U	8,149	B
S-22	Cactus Ave	Redlands Blvd	Cactus Ave Extension	C	2U***	527	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

Table 4.15-8: Existing (2018) Freeway Mainline Levels of Service

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	26.7	D	6,467	27.6	D	6,638	26.3	D	6,223	24.8	C
F-3	SR-60	Ramona Ave to Central Ave	8,109	38.6	**E**	9,400	47.3	**F**	6,167	24.4	C	6,459	26.1	D
F-4	SR-60	Central Ave to Mountain Ave	7,190	31.3	D	8,271	36.3	**E**	6,751	28.4	D	6,489	26.9	D
F-5	SR-60	Mountain Ave to Euclid Ave	7,513	33.6	D	8,231	36.0	**E**	6,859	28.8	D	6,883	29.0	D
F-6	SR-60	Euclid Ave to Grove Ave	7,423	33.0	D	8,339	36.9	**E**	7,108	29.3	D	7,527	32.6	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,809	28.9	D	9,236	45.4	**F**	6,656	26.2	D	9,400	51.0	**F**
F-8	SR-60	Vineyard Ave to Archibald Ave	6,662	27.8	D	9,400	47.3	**F**	7,821	34.9	D	9,400	53.0	**F**
F-9	SR-60	Archibald Ave to Haven Ave	6,718	28.1	D	6,764	26.6	D	See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	7,667	25.4	C	7,366	22.5	C	7,339	22.4	C	5,698	17.5	B
F-11	SR-60	Milliken Ave to I-15	4,225	16.8	B	5,182	19.4	C	5,456	20.8	C	5,111	19.6	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	3,541	14.0	B	4,369	16.3	B	4,888	14.7	B	4,648	14.3	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	2,913	11.5	B	3,567	13.3	B	5,070	19.2	C	5,970	23.7	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	2,437	9.8	A	2,959	11.3	B	4,277	16.3	B	4,958	19.3	C
F-15	SR-60	Pedley Rd to Pyrite St	2,650	10.7	A	3,232	12.3	B	4,296	16.3	B	4,981	19.4	C
F-16	SR-60	Pyrite St to Valley Way	3,348	13.3	B	3,642	13.8	B	4,326	16.4	B	5,020	19.6	C
F-17	SR-60	Valley Way to Rubidoux Blvd	4,515	24.5	C	5,262	28.0	D	4,515	23.2	C	5,262	29.2	D
F-18	SR-60	Rubidoux Blvd to Market St	4,697	25.7	C	5,477	29.8	D	4,697	24.1	C	5,477	30.6	D
F-19	SR-60	Market St to Main St	4,971	27.8	D	6,433	39.2	**E**	6,485	40.3	**E**	5,115	27.9	D
F-20	SR-60	Main St to SR-91	See Weaving Analysis			See Weaving Analysis			7,050	47.9	**F**	4,062	21.0	C
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,400	59.2	**F**	9,400	51.1	**F**	7,050	33.3	D	6,885	30.5	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	5,188	20.4	C	6,193	23.6	C	7,385	30.6	D	8,085	36.9	**E**
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			4,328	41.6	**E**	3,251	26.8	D
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,828	23.2	C	4,700	47.8	**F**	4,700	49.0	**F**	2,786	21.9	C
F-30	SR-60	Heacock St to Perris Blvd	2,529	20.2	C	3,336	25.9	C	3,192	25.1	C	3,003	24.0	C
F-31	SR-60	Perris Blvd to Nason St	2,269	17.9	B	2,843	21.3	C	2,592	19.5	C	2,695	21.0	C
F-32	SR-60	Nason St to Moreno Beach Dr	1,977	10.5	A	2,468	12.3	B	See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,757	9.4	A	2,053	10.2	A	1,817	14.0	B	1,882	14.7	B
F-34	SR-60	Redlands Blvd to Theodore St	1,671	13.4	B	1,708	12.8	B	1,481	11.6	B	1,504	11.8	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,600	12.9	B	1,738	13.0	B	1,460	11.4	B	1,486	11.7	B
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,271	13.5	B	1,319	12.3	B	1,121	13.4	B	1,165	12.7	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,272	10.2	A	1,317	10.0	A	1,121	9.0	A	1,165	9.3	A
F-39	SR-91	I-15 to McKinley St	4,206	15.7	B	6,373	26.2	D	6,576	26.3	D	7,158	31.4	D
F-40	SR-91	McKinley St to Pierce St	4,797	24.9	C	5,269	30.0	D	7,050	49.6	**F**	7,050	55.5	**F**
F-41	SR-91	Pierce St to Magnolia Ave	6,354	39.4	**E**	7,050	54.7	**F**	7,050	48.4	**F**	7,050	53.3	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			7,050	48.4	**F**	7,050	53.3	**F**
F-43	SR-91	La Sierra Ave to Tyler St	7,050	28.6	D	7,050	30.4	D	5,943	34.3	D	7,050	53.3	**F**
F-44	SR-91	Tyler St to Van Buren Blvd	7,101	28.7	D	7,990	37.2	**E**	6,106	23.6	C	7,990	37.2	**E**

Table 4.15-8: Existing (2018) Freeway Mainline Levels of Service (Continued)

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	4,763	17.8	B	4,956	19.4	C	6,381	25.0	C	7,990	37.2	**E**
F-46	SR-91	Adam St to Madison St	7,451	57.6	**F**	8,209	96.0	**F**	5,931	22.8	C	7,582	33.9	D
F-47	SR-91	Madison St to Arlington Ave	7,677	33.1	D	5,386	21.5	C	7,050	48.4	**F**	7,050	52.6	**F**
F-49	SR-91	Central Ave to 14th St	7,050	52.1	**F**	5,797	35.9	**E**	5,166	19.5	C	7,050	30.0	D
F-50	SR-91	14th St to University Ave	4,644	17.4	B	4,194	16.3	B	5,166	19.5	C	7,050	30.0	D
F-51	SR-91	University Ave to Spruce St	5,924	17.9	B	5,450	17.2	B	See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,739	14.4	B	3,285	16.4	B	2,294	11.5	B	2,318	11.5	B
F-68	I-215	Newport Rd to McCall Blvd	1,900	10.0	A	2,047	10.2	A	2,528	12.6	B	3,111	15.4	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	12.9	B	3,293	16.4	B	2,528	12.6	B	3,111	15.4	B
F-70	I-215	Ethanac Rd to SR-74	3,787	20.1	C	3,150	15.7	B	2,882	14.4	B	3,854	19.1	C
F-71	I-215	SR-74 to Redlands Ave	3,350	17.9	B	4,181	21.4	C	4,515	23.2	C	4,700	24.1	C
F-86	I-215	Redlands Blvd to D St	4,431	24.1	C	3,185	16.0	B	2,538	12.7	B	2,634	13.1	B
F-87	I-215	D St to Nuevo St/Harvil Ave	3,500	13.8	B	4,813	18.0	C	3,380	12.7	B	3,249	12.1	B
F-88	I-215	Nuevo St to Ramona Expy	4,515	24.8	C	5,262	28.4	D	4,515	23.2	C	5,262	28.0	D
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox Blvd	4,913	27.7	D	5,947	34.3	D	2,658	13.3	B	5,310	28.1	D
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	5,097	29.0	D	4,415	22.9	C	3,802	19.7	C	7,050	46.7	**F**
F-92	I-215	Van Buren Blvd to Cactus Ave	4,817	19.2	C	4,206	15.7	B	3,572	13.4	B	6,195	23.6	C
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,515	24.8	C	5,262	28.4	D	5,031	26.7	D	6,129	35.5	**E**
F-95	I-215	Eucalyptus Ave to SR-60	4,877	27.5	D	5,885	33.7	D	See Weaving Analysis			See Weaving Analysis		
F-74	I-215	Columbia Ave to Center St	6,697	28.8	D	7,050	28.6	D	7,050	29.6	D	7,050	28.4	D
F-75	I-215	Center St to La Cadena Dr	5,146	29.7	D	5,293	28.4	D	7,050	50.2	**F**	7,050	47.3	**F**
F-76	I-215	La Cadena Dr to Barton Rd	5,191	29.8	D	4,937	25.8	C	7,050	49.6	**F**	7,050	46.7	**F**
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,708	35.3	**E**	5,640	32.0	D	5,974	34.6	D	7,050	46.7	**F**
F-78	I-215	Mt. Vernon Ave to I-10	6,088	25.8	C	5,802	22.5	C	5,726	22.1	C	5,432	20.5	C
F-80	I-215	Auto Plaza Dr to Mill St	5,201	20.7	C	9,400	47.9	**F**	6,123	23.7	C	5,837	22.0	C
F-83	I-215	Baseline Rd to Highland Ave	3,158	12.5	B	4,700	17.6	B	4,700	17.6	B	3,704	13.7	B
F-52	I-10	SR-60 to Beaumont Ave	3,462	13.6	B	4,847	18.8	C	4,888	20.9	C	4,190	15.8	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,519	14.0	B	4,927	19.4	C	4,968	21.5	C	4,259	16.3	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,689	14.6	B	5,165	20.4	C	5,209	22.7	C	4,465	17.0	B
F-55	I-10	Highland Springs Ave to Sunset Ave	3,547	14.1	B	4,966	19.6	C	5,009	21.7	C	4,293	16.4	B
F-56	I-10	Sunset Ave to 22nd St	3,462	11.0	B	4,847	15.2	B	4,888	16.7	B	4,190	12.8	B
F-57	I-10	22nd St to 8th St	3,406	13.6	B	4,768	18.7	C	4,808	20.7	C	4,121	15.7	B
F-58	I-10	8th St to Hargrave St	3,406	13.6	B	4,768	18.7	C	4,808	20.7	C	4,121	15.7	B
F-59	I-10	Hargrave St to Fields Rd	3,065	12.3	B	4,291	16.9	B	4,327	18.6	C	3,709	14.2	B
F-60	I-10	Fields Rd to Morongo Trail	2,923	11.7	B	4,092	16.1	B	4,127	17.7	B	3,537	13.6	B
F-61	I-10	Morongo Trail to Main St	2,583	10.2	A	3,616	14.0	B	3,646	15.4	B	3,125	11.8	B
F-62	I-10	Main St to Haugen-Lehmann Way	2,583	10.1	A	3,616	14.0	B	3,646	15.4	B	3,125	11.7	B
F-64	I-10	SR-111 to Tipton Rd	2,242	8.8	A	3,139	12.1	B	3,165	13.4	B	2,713	10.2	A
F-65	I-10	Tipton Rd to SR-62	2,242	8.8	A	3,139	12.1	B	3,165	13.4	B	2,713	10.3	A

Indicates that the LOS exceeds the target level

Table 4.15-9: Existing (2018) Freeway Weaving Segment Levels of Service

ID	Freeway	Weaving Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,335	21	C	6,819	25	C	5,466	19.6	B	5,871	21.3	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			6,671	26.3	C	7,844	33.1	D
W-20	SR-60	Main St to SR-91	6,646	33.2	D	7,050	34.3	D	See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	6,137	25.2	C	9,400	42.1	**E**	5,660	21.3	C	5,717	21.6	C
W-22	SR-60	Blaine St/3rd St to University Ave	6,061	23.1	C	7,050	28.9	D	6,568	22.6	C	6,273	22.6	C
W-23	SR-60	University Ave to Martin Luther King Blvd	5,965	22.6	C	7,050	24.6	C	7,050	38.2	**E**	7,050	44.9	**F**
W-25	SR-60	Central Ave to Pan Isle Dr/Box Springs Rd	5,979	25.0	C	8,119	31.6	D	7,050	34.2	D	7,050	34.5	D
W-27	SR-60	I-215 to Day St	3,040	11.9	B	9,400	41.9	**E**	See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,197	14.4	B	7,050	32.7	D	4,700	30.6	D	3,279	20.4	C
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			2,207	12.1	B	2,252	12.5	B
W-35	SR-61	Theodore St to Gilman Springs Rd	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,925	32.1	D	7,050	34.8	D	See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,050	26.5	C	4,922	19.0	B	7,050	33.4	D	7,050	36.0	**E**
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			8,102	29.2	D	11,750	> Capacity	**F**
W-93	I-215	Cactus Ave to Alessandro Blvd	4,515	23.1	C	5,262	24.1	C	5,036	23.0	C	6,139	28.5	D
W-95	I-215	Eucalyptus Ave to SR-60	See Basic Analysis			See Basic Analysis			6,019	21.4	C	7,017	25.6	C
W-73	I-215	SR-60 to Columbia Ave	4,275	> Capacity	**F**	4,317	22.0	C	7,050	35.1	**E**	7,050	34.9	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,300	23.3	C	9,400	35.0	D	6,311	21.8	C	6,261	21.9	C
W-81	I-215	Mill St to 2nd St	5,888	22.2	C	7,050	26.6	C	7,050	24.5	C	6,421	22.7	C
W-82	I-215	5th St to Baseline Rd	4,255	12.6	B	7,050	21.8	C	7,050	22.5	C	5,762	18.0	B
W-63	I-10	Haugen-Lehmann Way to SR-111	2,583	8.7	A	3,616	12.1	B	3,646	13.9	B	3,125	11.7	B

Indicates that the LOS exceeds the target level

Table 4.15-10: Existing (2018) Freeway Ramp Levels of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	9,134	266	37.1	**F**	8,384	1,016	34.3	**F**
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,529	450	14.5	B	6,913	1,206	22.2	C
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,757	278	3.3	A	2,053	543	4.9	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,575	96	15.4	B	1,609	99	14.7	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,671	133	18.6	B	1,708	40	17.8	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,569	31	17.9	B	1,703	35	18.1	B
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,600	335	17.9	B	1,738	428	18.1	B
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,264	7	14.2	B	1,310	9	13.8	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	1,121	10	13.3	B	1,165	10	13.6	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	1,111	349	15.3	B	1,155	331	15.6	B
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,460	38	15.7	B	1,486	29	16.1	B
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,422	59	12.8	B	1,457	47	13.1	B
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,481	73	16.4	B	1,504	73	16.7	B
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,427	390	15.6	B	1,448	434	16.3	B
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	606	2.8	A	7,050	498	3.3	A
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	595	22.2	C	6,885	976	24.8	C

Indicates that the LOS exceeds the target level

4.15.2 Existing Policies and Regulations

The City of Moreno Valley's current General Plan was approved in July 2006, and the following goals and policies are extracted from the Circulation Element of the current General Plan.

Community Development

Policy 2.2.17 Discourage nonresidential uses on local residential streets that generate traffic, noise, or other characteristics that would adversely affect nearby residents.

Circulation Element

Objective 5.1 **Create a safe, efficient, and neighborhood-friendly street system.**

Policy 5.1.1 Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.

Policy 5.1.2 Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.

Policy 5.1.3 Require adequate off-street parking for all developments.

Policy 5.1.4 Driveway placement shall be designed for safety and to enhance circulation wherever possible.

Policy 5.1.5 Incorporate American Disability Act (ADA) and Title 24 requirements in roadway improvements as appropriate.

Policy 5.1.6 Design new developments to provide opportunity for access and circulation to future adjacent developments.

Objective 5.2 **Implement access management policies.**

Policy 5.2.1 Locate residential units with access from local streets. Minimize direct residential access from collectors. Prohibit direct single-family driveway access on arterials and higher classification roadways.

Policy 5.2.2 Feed short local street into collectors.

Policy 5.2.3 Encourage the incorporation of traffic calming design into local and collector streets to promote safe vehicle speeds.

Policy 5.2.4 Design new subdivisions to minimize the disruptive impact of motor vehicles on local streets. Long, broad and linear streets should be avoided. Residential streets should be no wider than 40 feet, and should have an uninterrupted length of less than one half mile. Curvilinear streets and cul-de-sacs are preferred. Streets within the subdivision should be designed to facilitate access to residences and to discourage through traffic.

Objective 5.3 **Maintain Level of Service (LOS) "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR 60 and high employment centers.**

Policy 5.3.1 Obtain right-of-way and construct roadways in accordance with the designation shown on the General Plan Circulation Element Map and the City street improvement standards.

Policy 5.3.2 Wherever feasible, promote the development of roadways in accordance with the City standard roadway cross-sections, as shown in Figure 9-3. Cross-sections range from two-lane undivided roadways to 8-lane divided facilities.

Policy 5.3.3 Create new roadway classifications to accommodate future traffic demand, including; Divided Major Arterial – Reduced Cross-Section, and Divided Arterial – 6-lane. These cross-sections are shown on Figure 9-3.

Policy 5.3.4 For planning purposes, utilize LOS standards shown on Table 5 –1 to determine recommended roadway widths.

Policy 5.3.5 Ensure that new development pays a fair-share cost to provide local and regional transportation improvements and to mitigate cumulative traffic impacts. For this purpose, require new developments to participate in Transportation Uniform Mitigation Fee (TUMF), the Development Impact Fee Program (DIF), and any other applicable transportation fee programs and benefit assessment districts.

Policy 5.3.6 Where new developments would increase traffic flows beyond the LOS C (or LOS D, where applicable), require appropriate and feasible mitigation measures as a condition of approval. Such measures may include extra right-of-way and improvements to accommodate left-turn and right-turn lanes at intersections, or other improvements.

Policy 5.3.7 Provide consideration to projects that have overriding regional or local benefits that would be desirable even though the LOS standards cannot be met. These projects would be required to analyze traffic impacts and mitigate such impacts to the extent that it is deemed feasible.

Policy 5.3.8 Pursue arterial improvements that link and/or cross the State Route 60 (SR-60) Freeway, including an additional over-crossing at Graham Street.

Policy 5.3.9 Address additional widenings at arterials providing access to SR-60 at Day Street, Frederick Street/Pigeon Pass Road, and Perris Boulevard.

Objective 5.4 **Maximize efficiency of the regional circulation system through close coordination with State and regional agencies and implementation of regional transportation policies.**

Policy 5.4.1 Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways, and interchange expansion.

Policy 5.4.2 Coordinate with Caltrans and RCTC regarding the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations of the Inland Empire Regional ITS Architecture Project.

Policy 5.4.3 Work with property owners, in cooperation with RCTC, to reserve rights-of-way for potential Community and Environmental Transportation Acceptability Process (CETAP) corridors through site design, dedication, and land acquisition, as appropriate.

Policy 5.4.4 The City Council will commit to establishing ongoing relationships with all agencies that play a role in the development of the City's transportation system. Council members who are appointed to these agencies as City representatives shall seek out leadership roles to maximize their effectiveness on behalf of the City. Council will strive to maintain continuity in their appointments of representatives.

Policy 5.4.5 Work with RCTC, WRCOG, and the TUMF Central Zone Committee to facilitate the expeditious construction of TUMF Network projects, especially projects that directly benefit Moreno Valley.

Policy 5.4.6 Cooperatively participate with SCAG, RCTC, and WRCOG in the planning for a transportation system that anticipates regional needs for the safe and efficient movement of goods and people.

Policy 5.4.7 Utilizing a combination of regional, state and federal funds, development impact fees, and other locally generated funds, provide needed improvements along SR 60 and the associated interchanges, including interchange and grade separation improvements.

Policy 5.4.8 Reserve rights-of-way to accomplish future improvements as specified in the Caltrans District 8 Route Concept Fact Sheet for SR-60. Specifically, SR-60 shall be built to six general purpose lanes and two High Occupancy Vehicle (HOV) lanes through Moreno Valley. Additional auxiliary lanes may be required between interchanges. The need for auxiliary lanes will be determined from future studies.

Policy 5.4.9 Lobby the State Legislature to keep triple trailer trucks off highways in developed areas of California.

Objective 5.5 **Maximize efficiency of the local circulation system by using appropriate policies and standards to design, locate, and size roadways.**

Policy 5.5.1 Space Collectors between higher classification roadways within development areas at appropriate one-quarter mile intervals.

Policy 5.5.2 Provide dedicated left-turn lanes at all major intersections on minor arterials and higher classification roadways.

Policy 5.5.3 Prohibit points of access from conflicting with other existing or planned access points. Require points of access to roadways to be separated sufficiently to maintain capacity, efficiency, and safety of the traffic flow.

Policy 5.5.4 Wherever possible, minimize the frequency of access points along streets by the consolidation of access points between adjacent properties on all circulation element streets, excluding collectors.

Policy 5.5.5 Design streets and intersections in accordance with the Moreno Valley Municipal Code.

Policy 5.5.6 Consider the overall safety, efficiency and capacity of street designs as more important than the location of on-street parking.

Policy 5.5.7 For developments fronting both sides of a street, require that streets be constructed to full width. Where new developments front only one side of a street, require that streets be constructed to half width plus an additional 12-foot lane for opposing traffic, whenever possible. Additional width may be needed for medians or left and/or right turn lanes.

Policy 5.5.8 Whenever possible, require private and public land developments to provide on-site and off-site improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system. The City may require developers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.

Policy 5.5.9 Design curves and grades to permit safe movement of vehicular traffic per applicable Caltrans and Moreno Valley standards.

Policy 5.5.10 Provide adequate sight distances for safe vehicular movement at all intersections and driveways.

Policy 5.5.11 Implement National Pollutant Discharge Elimination System (NPDES) Best Management Practices (BMPs) relating to construction of roadways to control runoff contamination from affecting water resources.

Objective 5.6 **Support development of a ground access system to March Inland Port in accordance with its development plan as a major cargo airport.**

Policy 5.6.1 Ensure that City arterials that provide access to and from March Inland Port are properly designed to accommodate projected traffic volumes, including truck traffic.

Policy 5.6.2 Ensure that traffic routes to March Inland Port are planned to minimize impacts to City residential communities.

Objective 5.7 **Design roads to meet the needs of the residents of the community without detracting from the "rural" atmosphere in designated portions of Moreno Valley. (Designated "rural" areas include those encompassed by the Residential Agriculture 2, Residential 1, Rural Residential and Hillside Residential zoning districts. "Urban" areas encompass all other zoning districts.)**

Policy 5.7.1 Pursue development of modified sidewalk standards for local and collector roads within low density areas to reflect the rural character of those areas.

Policy 5.7.2 Provide sidewalks on arterials in designated low density areas that provide access to schools and bus stops.

Objective 5.8 **Encourage development of an efficient public transportation system for the entire community.**

Policy 5.8.1 Support the development of high-speed transit linkages, or express routes, that would benefit the citizens and employers of Moreno Valley.

Policy 5.8.2 Support the efforts of the March Joint Powers Authority in its pursuit of a Transit Center.

Policy 5.8.3 Encourage public transportation opportunities that address the particular needs of transit dependent individuals in the City such as senior citizens, the disabled and low-income residents.

Policy 5.8.4 Ensure that all new developments make adequate provision for bus stops and turnout areas for both public transit and school bus service.

Policy 5.8.5 Continue ongoing coordination with transit authorities toward the expansion of transit facilities into newly developed areas.

Objective 5.9 **Support and encourage development of safe, efficient and aesthetic pedestrian facilities.**

Policy 5.9.1 Encourage walking as an alternative to single occupancy vehicle travel, and help ensure the safety of the pedestrian as follows:

(a) All new developments shall provide sidewalks in conformance with the City's streets cross-section standards, and applicable policies for designated urban and rural areas.

(b) The City shall actively pursue funding for the infill of sidewalks in developed areas. The highest priority shall be to provide sidewalks on designated school routes.

Policy 5.9.2 Walkways shall be designed to minimize conflicts between vehicles and pedestrians.

Policy 5.9.3 Where appropriate, provide amenities such as, but not limited to, enhanced paving, seating, and landscaping to enhance the pedestrian experience.

Policy 5.9.4 Require the provision of convenient and safe pedestrian access to buildings from the public sidewalk.

Objective 5.10 **Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution.**

Policy 5.10.1 Bikeways shall link residential neighborhood areas with parks, employment centers, civic and commercial areas, and schools.

Policy 5.10.2 Integrate bikeways, consistent with the Bikeway Plan, with the circulation system and maintain Class II and III bikeways as part of the City's street system.

Policy 5.10.3 Support bicycle safety programs, and active enforcement of laws relating to the safe operation of bicycles on City streets.

Policy 5.10.4 Link local bikeways with existing and planned regional bikeways.

Objective 5.11 **Eliminate obstructions that impede safe movement of vehicles, bicyclists, and pedestrians.**

Policy 5.11.1 Landscaping adjacent to City streets, sidewalks and bikeways shall be designed, installed and maintained so as not to physically or visually impede public use of these facilities.

(a) The removal or relocation of mature trees, street trees and landscaping may be necessary to construct safe pedestrian, bicycle and street facilities.

(b) New landscaping, especially street trees shall be planted in such a manner to avoid overhang into streets, obstruction of traffic control devices or sight distances, or creation of other safety hazards.

Policy 5.11.2 Driveways shall be designed to avoid conflicts with pedestrian and bicycle travel.

Objective 5.12 **Promote efficient circulation planning for all school sites that will maximize pedestrian safety, and minimize traffic congestion and neighborhood impacts.**

Policy 5.12.1 Coordinate with school districts to identify suggested pedestrian routes within existing and new subdivisions for school children to walk to and from schools and/or bus stops.

Program 5-1 Periodically review current traffic volumes, traffic collision data, and the pattern of urban development to coordinate, program, and as necessary revise the planning and prioritization of road improvements.

Program 5-2 Periodically reassess the goals, objectives and policies statements of the Circulation Element and propose amendments, as necessary.

Program 5-3 Develop a comprehensive strategy to ensure full funding of the circulation system. The strategy will include the DIF, TUMF, and other funding sources that may be available to the City. In addition, the creation of benefit assessment districts, and road and bridge fee districts may be considered where appropriate.

Program 5-4 Develop a multi-year transportation infrastructure improvement program that, to the extent feasible, phases the construction of new projects in advance of new development.

Program 5-5 The above-referenced program will prioritize circulation improvement projects to be funded from DIF, TUMF and other sources. Prioritization to consider the following factors: (a) Traffic safety; (b) Congestion relief; (c) Access to new development; and (d) Equitable benefit.

Program 5-6 Conduct studies of specified arterial segments to determine if any additional improvements will be needed to maintain an acceptable LOS at General Plan buildout. Generally, these segments will be studied as new developments are proposed in their vicinity. Measures will be identified that are consistent with the Circulation Element designation of these roadway segments, such as additional turn lanes at intersections, signal optimization by coordination and enhanced phasing, and travel demand management measures. The study of specified arterial segments will be required to identify measures to maintain an acceptable LOS at General Plan buildout for at least one of the reasons discussed below:

(a) Segments will need improvement, but their ultimate volumes slightly exceed design capabilities.

(b) Segments will need improvements but require inter-jurisdictional coordination.

(c) Segments would require significant encroachment on existing adjacent development if built out to their Circulation Element designations.

Program 5-7 Establish traffic study guidelines to deal with development projects in a consistent manner. The traffic study guidelines shall include criteria for projects that propose changes it the approved General Plan land uses.

Program 5-13 Implement Transportation demand management (TDM) strategies that reduce congestion in the peak travel hours. Examples include carpooling, telecommuting, and flexible work hours.

4.15.3 Methodology

This section summarizes: i) the traffic volume scenarios analyzed in this EIR and methods of traffic volume projection; ii) the proposed project's trip generation, distribution and assignment, and iii) opening year traffic.

4.15.3.1 Traffic Volume Scenarios

Existing Baseline, Existing Baseline Plus Phase 1, and Existing Baseline Plus Project Conditions. The existing year (2018) represents the baseline traffic conditions as they existed at the time the Revised Sections of the FEIR was issued to represent pre-project approval (existing physical conditions). The existing baseline plus project analysis determines direct project-related traffic impacts that would occur on the existing roadway system in a theoretical scenario in which the project is placed upon existing baseline conditions.

Within the WLC project site, the Phase 1 land uses were used for the "Plus Phase 1" scenarios, the proposed project buildout land uses were used for the "Plus Project" scenarios, while the existing land uses were used for the "No Project" scenarios. The Existing Plus Phase 1 and Existing plus Project analyses are intended to identify the project-specific impacts associated solely with the development of the project and the corresponding mitigation measures necessary to mitigate the project-related impacts.

Year 2025 and Year 2025 Plus Phase 1 Conditions. The year 2025 analysis determines the project's cumulative contribution to near-term traffic impacts based on a comparison of year 2025 conditions to year 2025 plus Phase 1 of the project conditions. Within the site, the proposed Phase 1 land uses were used for the "Plus Phase 1" scenarios while the existing land uses were used for the "No Project" scenarios.

The opening year 2025 cumulative analysis has been utilized to determine if improvements funded through local and regional transportation mitigation fee programs, such as the Transportation Uniform Mitigation Fee (TUMF) program and the City of Moreno Valley Development Impact Fee (DIF) program, can accommodate the cumulative traffic at the target LOS identified in the City of Moreno Valley General Plan. If the regionally funded improvements can provide the target LOS, and the payment of such funds for such improvements is foreseeable, then the project's payment into the established fee programs will be considered as mitigation for cumulative impacts through the conditions of approval. Other improvements needed beyond the regionally funded improvements (such as localized improvements to non-TUMF, or non-DIF) are identified in the impacts section (Section 4.15.5).

The circulation system assumed in the analysis includes transportation improvement projects that are either under construction or are funded and planned for implementation in the short-term. These improvement projects are identified in SCAG's 2012-2035 Regional Transportation Plan (RTP). The

RTP is a long-range transportation plan based on 20-year growth projections that is developed and updated by SCAG every four years. The Federal Transportation Improvement Program (FTIP) is a capital listing of all transportation improvement projects proposed over a six-year period for the SCAG region. The FTIP implements the transportation projects and programs listed in the RTP in compliance with state and federal requirements. For the 2025 scenarios, only the projects in the FTIP and the RTP's financially constrained[1] project list were assumed to be completed. The projects in the RTP's Strategic Plan were not included because funding for them is too uncertain. Also, the proposed East-West Freight Corridor included in the financially constrained plan was not included because the freight corridor is expected to be funded through tolls to be collected by a process that has not yet been established and whose future efficacy is unknown. If it is constructed, then traffic impacts would be less than those described in this EIR. The 2025 improvements are shown in Figure 4.15.5.

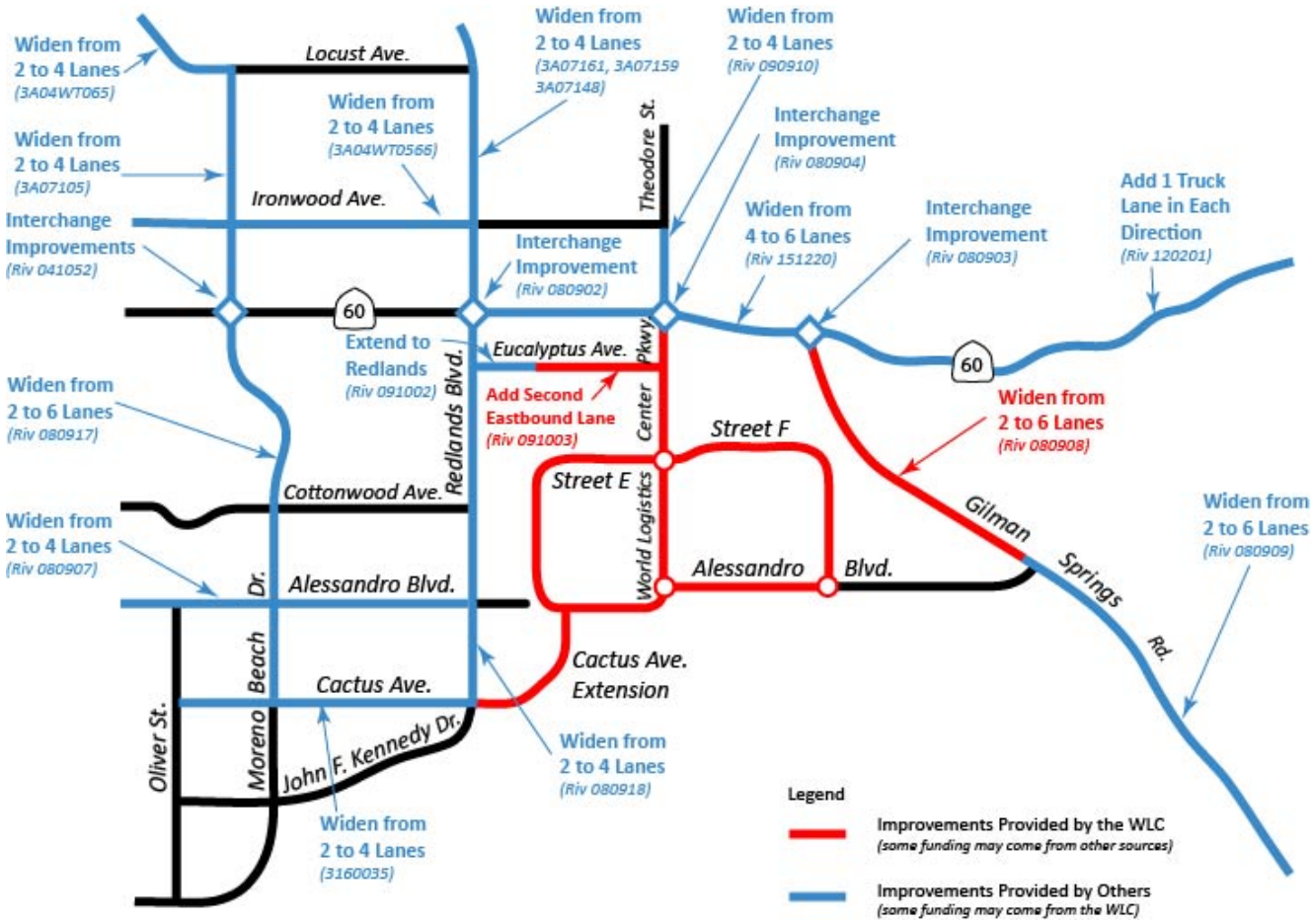


Figure 4.15.5: Roadway Improvements Assumed for 2025

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

Phase 1 of the proposed project will be completed in 2025 and includes 21,450,000 square feet of logistics warehouse uses. This is approximately 52 percent of the total project building space. The internal road system will be partially built out, with east-west through traffic served by the Cactus Avenue extension and Streets C and E. World Logistics Center Parkway would serve north-south traffic as it does today.

[1] These are the projects for which funds are committed or have reasonably available revenue sources, and are probable for implementation.

Traffic projections for year 2025 conditions were derived from the RivTAM using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing (2018) baseline conditions and horizon year (2025) conditions. Specifically, traffic generated by other approved projects (cumulative projects) in the vicinity of the proposed project were included in the socioeconomic inputs for the year 2025 traffic volume scenario as shown in the Traffic Impact Analysis Report, dated July 2018. Table 4.15-11 summarizes the forecast years as well as each development scenario analyzed.

Table 4.15-11: Analysis Scenarios

Forecast Year	Scenarios Analyzed
2018	• Existing (2018) Baseline Conditions. • Existing (2018) Baseline Plus Phase 1 Conditions Project (21,450,000 square feet). • Existing Baseline plus Project Conditions.
2025	• Year 2025 without Project Conditions Analysis based on data from the RivTAM plus cumulative projects. • Year (2025) plus Phase 1 Project (21,450,000 square feet).
2040	• Year 2040 Cumulative, without Project: Analysis based on data from the RivTAM plus cumulative projects. • Year 2040 Cumulative plus Project.

4.15.3.2 Project Trip Generation, Distribution, and Assignment

Based on the proposed WLC Specific Plan, high-cube logistics warehousing would comprise 99.4% of the floor space of the WLC, so a considerable amount of deliberation and study went into the selection of the most appropriate trip generation rate for this particular type of building. In the 2014 TIA four possible sources of trip generation rates were identified and evaluated, with a combination of two sources eventually being used. These were ITE's *Trip Generation Manual 9th Edition* being the source of the overall trip generation rate and the City of Fontana *Truck Trip Generation Study* being the source of the vehicle mix percentages.

Given the growing importance of high-cube logistics to southern California and plethora of small, conflicting studies of trip-generation rates for that type of building, a consensus formed on the need for a single, comprehensive survey that would provide definitive trip-gen rates for use in TIAs going forward. Accordingly, the South Coast Air Quality Management District (SCAQMD), a leading environmental agency for Riverside County, and the National Association of Industrial and Office Properties (NAIOP), representing developers, jointly sponsored a study to be conducted by a highly respected neutral party, ITE. The findings of this very large[1] study were released in October 2016 as a report entitled *High-Cube Warehouse Vehicle Trip Generation Analysis*.

The 2016 ITE study found that on average high-cube transload and short-term storage warehouses, the type of warehouse proposed for the WLC, generate fewer trips than had been assumed in the previous TIA for every analysis period (24% fewer in the AM peak period, 14% fewer in the PM peak hour, and 15% fewer on a daily basis). However, the volume of truck trips being generated in off-peak periods was higher than had been previously assumed. These results have been incorporated into the 10th edition of ITE's *Trip Generation Manual* in a new land use code (Code 154). SCAQMD has indicated its acceptance of these results on its website[2],

[1] Counts were taken at 107 sites

[2] http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/high-cube-warehouse accessed 2/16/2018

> "*Draft final results for the Warehouse Truck Trip Study were completed and were lower than SCAQMD recommended truck trip rates in the California Emissions Estimator Model (CalEEMod). Staff recommends truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in SCAQMD. Consistent with CEQA Guidelines, a CEQA document may use a non-default trip rate if there is substantial evidence in the recording supporting another rate is more appropriate for the air quality analysis.*"

Based on the substantial evidence collected by ITE and presented in the 10th edition of ITE's *Trip Generation Manual* and in *High-Cube Warehouse Vehicle Trip Generation Analysis*, the data from these two sources were used in the current analysis of WLC traffic impacts. Specifically, the trip generation rates and directionality (percent of vehicle entering and leaving the site) were taken from the 10th edition of *Trip Generation Manual*, while the percentage of vehicles in each vehicle class was taken from *High-Cube Warehouse Vehicle Trip Generation Analysis*. A mixture was required because Trip Generation Manual reported the directional split but not the vehicle mix while High-Cube Warehouse Vehicle Trip Generation Analysis reported the vehicle mix but not the directional mix.

High-Cube Warehouse Vehicle Trip Generation Analysis classified vehicles into three classes, namely passenger vehicles, 2- to 4-axle trucks, and 5+ axle trucks. The "passenger vehicles" category corresponds directly with the "passenger vehicle" category used in the RIVTAM model, and all of the vehicles in the "5+ axle trucks" fall within RIVTAM's "Heavy Truck" category. However, ITE's middle category, 2- to 4-axle trucks, covers three different categories used in RIVTAM. Specifically, 2-axle trucks correspond with RIVTAM's "Light Truck" category, 3-axle trucks correspond with RIVTAM's "Medium Truck" category, and 4-axle trucks fall within RIVTAM's "Heavy Truck" category along with 5+ axle trucks. Vehicle mix data from NAIOP's survey of 31 southern California warehouses was used to disaggregate ITE's middle category into the corresponding RIVTAM vehicle classes.

Using these rates, the trips that would be generated by the WLC are shown in Table 4.15-12.

Table 4.15-12: Trip Generation Rates - Proposed and Existing Land Uses

Vehicle Class	Vehicle Class	AM Peak Hour		PM Peak Hour		ADT
		In	Out	In	Out	
High-Cube Logistics (per KSF)	Pass Veh	0.029	0.028	0.024	0.055	0.963
	Light Trucks	0.002	0.002	0.002	0.003	0.074
	Medium Trucks	0.001	0.002	0.002	0.003	0.097
	Heavy Trucks	0.007	0.009	0.005	0.006	0.266
	Total	0.039	0.041	0.034	0.066	1.400
Light Logistics (per KSF)	Pass Veh	0.105	0.031	0.041	0.111	1.397
	Light Trucks	0.007	0.002	0.003	0.007	0.090
	Medium Trucks	0.006	0.002	0.002	0.006	0.078
	Heavy Trucks	0.013	0.004	0.005	0.014	0.174
	Total	0.131	0.039	0.051	0.139	1.740
Utilities (per KSF)	Pass Veh	1.426	0.357	0.350	1.401	10.217
	Light Trucks	0.211	0.053	0.052	0.207	1.511
	Medium Trucks	0.048	0.012	0.012	0.047	0.341
	Heavy Trucks	0.163	0.041	0.040	0.161	1.171
	Total	1.848	0.462	0.454	1.816	13.240
Gas Station w Mart (Pumps)	Heavy Trucks	1.160	1.114	0.899	0.864	31.613
Fire Station (site)	Pass Veh	20.000	8.000	10.000	20.000	137.000
Convenience Market (KSF)	Pass Veh	13.209	13.209	10.580	10.165	321.873

Notes: 1) Trips for gas station and convenience market are net of pass-by and diverted trips
2) Trucks using the fueling stations are all non-diesel

Table 4.15-13: Project Trips Generated by Proposed and Existing Land Uses

	Unit	Amount	AM Peak Hour			PM Peak Hour			ADT
			In	Out	Total	In	Out	Total	
Proposed Land Uses									
High-Cube Logistics Center	KSF	40,400	1,589	1,643	3,232	1,370	2,673	4,043	56,560
Light Logistics	KSF	200	26	8	34	10	28	38	348
SCG Valve/Metering Station (Utilities)	KSF	0.15	0.3	0.1	0.3	0.1	0.3	0	2.0
SDG&E Gas Compression Station (Utilities)	KSF	30.8	57	14	71	14	56	70	408
Fire Station	Site	1.0	20	8	28	10	20	30	137
Gas Station with Convenience Store	Pumps	12	14	13	27	11	10	21	379
Convenience Store	KSF	3	40	40	79	32	30	62	966
Total			1,746	1,726	3,472	1,447	2,818	4,265	58,800
Existing Land Uses									
Single-Family Dwellings (ITE Code 210)	DU	7	1	4	5	4	3	7	66
SCG Valve/Metering Station (Utilities)	KSF	0.15	0.3	0.1	0.3	0.1	0.3	0.3	2
SDG&E Gas Compression Station (Utilities)	KSF	30.8	57	14	71	14	56	70	408
Total			58	18	77	18	59	77	476
Difference			1,688	1,708	3,395	1,429	2,759	4,188	58,324

Table 4.15-14: Project Trips by Vehicle Type

Phase and Vehicle Type	AM Peak Hour			PM Peak Hour			ADT
	In	Out	Total	In	Out	Total	
Phase 1							
Pass Veh	763	691	1,454	608	1,349	1,958	23,532
Light Trucks	52	56	108	52	66	118	1,751
Medium Trucks	35	41	76	54	65	119	2,226
Heavy Trucks (using alternative fuel station, so non-diesel)	14	13	27	11	10	21	379
Heavy Trucks	174	207	380	121	148	269	6,143
Total	1,037	1,008	2,046	846	1,638	2,484	34,031
Phase 2							
Pass Veh	517	487	1,003	429	973	1,402	17,066
Light Trucks	35	42	77	39	46	85	1,313
Medium Trucks	26	31	58	41	49	90	1,702
Heavy Trucks	130	157	288	92	111	203	4,688
Total	709	718	1,426	602	1,179	1,781	24,769
Full Build-Out							
Pass Veh	1,280	1,178	2,458	1,038	2,322	3,360	40,598
Light Trucks	87	98	185	90	112	203	3,064
Medium Trucks	61	73	134	95	114	209	3,928
Heavy Trucks (using alternative fuel station, so non-diesel)	14	13	27	11	10	21	379
Heavy Trucks	304	364	668	214	259	473	10,831
Total	1,746	1,726	3,472	1,447	2,818	4,265	58,800

Truck Distribution. The truck trip distribution patterns have been developed based on the anticipated travel patterns for the proposed project's high-cube logistics warehousing trucks. Since the internal trips, the port-related trips, and the majority of external trips (all but those on I-10) use routes west of the project site, it is anticipated that a large majority of the WLC truck traffic will be oriented to the west of the project, with a much smaller amount to and from the east. In addition, the majority of project truck traffic would use the freeway system to enter and leave the project area due to truck routing restrictions. Based on these factors, truck trips generated by the proposed project would be oriented in the following manner (See Figure 37 of the WLC TIA):

- 82 percent to/from the west via one or more freeways;
- 6 percent to/from the north via surface streets;
- 9 percent to/from the east utilizing SR-60 and I-10; and
- 3 percent to/from the southeast via surface streets.

Auto Distribution. Figure 32 of the WLC TIA indicates that daily passenger vehicle traffic will distribute in the following directions:

- 44 percent to/from the west on SR-60;
- 9 percent to/from the east on SR-60 (east of Gilman Springs Road);
- 11 percent to/from the southeast on Gilman Springs Road;
- 29 percent to/from the south on Cactus Avenue; and
- 7 percent to/from the north along Theodore Street.

Moreno Valley currently has a jobs/housing imbalance that results in long westbound commutes for thousands of city residents every workday. The WLC would create approximately 25,000 new jobs; nearly doubling the number of jobs in Moreno Valley. This would have four effects on commute patterns. First, many current and future residents of Moreno Valley would be able to work locally with very short commute trips.

Second, residents of neighboring cities who work at the WLC would have short commutes and, importantly, be able to access the site using the arterial road network. This is consistent with the policies of the Western Riverside Council of Governments and the Riverside County Transportation Commission to promote use of the arterial road network as an alternative to freeways. Tests with the RIVTAM model (see Figure 32 of the WLC TIA) suggest that nearly half of auto traffic associated with the WLC would be on surface streets; i.e., not on freeways.

Third, workers coming from more distant locations would, in most cases, be traveling on freeways in the off-peak direction; i.e., commuters traveling to the WLC from Los Angeles or Orange Counties would be headed eastbound in the morning and westbound in the evening. This would enable them to take advantage of the existing unused off-peak capacity of freeways, since the freeways were sized for flows in the peak direction.

Fourth, because the RIVTAM model assumes that WLC employees would work elsewhere if the WLC project were not implemented, then the availability of jobs at the east end of Moreno Valley would reduce the number of workers driving long commutes to distant jobsites to the west and southwest. Although the project would increase freeway auto traffic eastbound in the morning, it would also decrease the traffic in the more congested westbound direction. In the evening the pattern would reverse, with the project relieving traffic in the congested eastbound direction. Therefore, the WLC project would have a net beneficial impact on the regional freeway auto traffic. This is consistent with the policies of SCAG, WRCOG, and other regional governments and agencies to encourage better jobs/housing balances as a way to reduce peak directional flows on the regional freeway system.

The assignment of traffic from the project area to the adjoining roadway system is based upon the project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the project. For more information on project trip generation and distribution for both trucks and passenger vehicles over and above the summary above, see the project TIA (WSA July 2018, Revised Sections of the FEIR Appendix). It is important to note that all trucks must use established truck routes within the City of Moreno Valley by the Municipal Code, while passenger vehicles will distribute onto the freeway and local streets depending on their destinations.

It should be noted that all technical studies based all or in part on traffic (i.e., air quality, greenhouse gases, and noise) have used these same assumptions regarding trip generation, trip length, etc. from the project TIA for their assessments of project impacts.

Passenger Car Equivalents. The analytical methods used to forecast traffic impacts must take into account the driving characteristics of different classes of vehicles. This is typically done through the

use of passenger car equivalent (PCE) factors, which convert the number of heavy vehicles in the traffic stream into an equivalent number of passenger cars. The term PCE was first used in the 1965 *Highway Capacity Manual* (HCM), and was determined by comparing the relative number of passing of trucks by passenger cars in relation to number of passing of passenger car by passenger cars. According to the *HCM 2000*:

> *The entry of heavy vehicles-that is, vehicles other than passenger cars (a category that includes small trucks and vans)-into the traffic stream affects the number of vehicles that can be served. Heavy vehicles are vehicles that have more than four tires touching the pavement.*
>
> *Trucks, buses, and recreational vehicles (RVs) are the three groups of heavy vehicles addressed by the methods in this manual. Heavy vehicles adversely affect traffic in two ways:*
>
> - *They are larger than passenger cars and occupy more roadway space; and*
> - *They have poorer operating capabilities than passenger cars, particularly with respect to acceleration, deceleration, and the ability to maintain speed on upgrades.*
>
> *The second impact is more critical. The inability of heavy vehicles to keep pace with passenger cars in many situations creates large gaps in the traffic stream, which are difficult to fill by passing maneuvers. The resulting inefficiencies in the use of roadway space cannot be completely overcome. This effect is particularly harmful on sustained, steep upgrades, where the difference in operating capabilities is most pronounced, and on two-lane highways, where passing requires use of the opposing travel lane.*

Grade is by far the most important determinant in the PCE factor to be used. The HCM's recommended PCE for trucks ranges from 1.5 for places with slopes of less than 2 percent up to 7.0 for places with steep grades more than a mile long. HCM's recommended PCE factors were used for the freeway analysis.

For the analysis of surface streets, the City's TIA guidelines mandate the use of PCE factors taken from the San Bernardino County CMP, 2003 Update. These are more precise and on average somewhat higher than the HCM rates, because HCM recommends two PCEs per heavy truck while the San Bernardino County CMP uses three (see PCE Factors table below). This means that the San Bernardino County CMP PCE rates used in the WLC analysis represent a deliberately conservative approach in the sense that the analysis will tend to over-state the impact of trucks on traffic conditions.

PCE Factors for Surface Streets

Vehicle Class	HCM	San Bernardino CMP
Passenger Cars	1.0	1.0
2-Axle Trucks	2.0	1.5
3-Axle Trucks		2.0
4 or more-Axle Trucks		3.0

Potential Rail Alternative. This section describes why rail service is not considered a viable option for reducing the traffic impacts of the WLC. This conclusion is based on several factors, including the physical constraints to bringing rail service to the WLC site, the cost of cargo movement by rail relative to movement by truck, capacity constraints in the rail system that the WLC branch line would tie into, and the minimal effect that rail service would have even if all other factors could be overcome. These factors are discussed in turn below.

The Possible Alignments for Bringing Rail Service to the WLC Site. The WLC site is not currently served by rail. The rail lines nearest the site are the Union Pacific Yuma Line (single-track in this area), the Riverside County Transportation Commission's San Jacinto Branch Line (single-track, currently inactive), and the BNSF double-track line through the City of Riverside (see TIA Figure 36).

There are four general alignment possibilities for a branch line to the WLC. Each alignment is inherent with significant problems as follows:

- Western Alignment – Alignments running from the BNSF line in Riverside to the WLC, an approximate distance of 15 miles, would have to run through built-up areas of the Cities of Riverside and Moreno Valley. The cost of acquiring right-of-way through these areas, and the impacts to the community (noise, traffic disruption, safety, division of the community, etc.) render such alignments unviable. Moreover, trains using the at-grade rail crossings in the City of Riverside already impose substantial delays on road traffic. In fact, in recent years the City of Riverside has sued the ports over the issue of traffic impacts from additional trains passing through the city. Adding more crossings and more trains would exacerbate this problem.
- Southern Alignment – It would be possible to avoid densely populated and built-out areas by connecting to the San Jacinto Branch Line south of March Air Reserve Base. However, the only way to avoid established communities would be to pass along the northern portion of the Lake Perris State Recreation Area. The alignment, approximately 10 miles in length, would be a major impact as it would require constructing and operating a rail line along the slopes of the Lake Perris State Recreation Area and potentially the San Jacinto Wildlife Area. There would also be traffic impacts at road crossings, potential grade issues, and grade separated crossings needed for drainage channels and I-215. The impacts and costs of this approach would be disproportionate to the benefit of removing WLC trucks from the freeways (which will be discussed in a later section).
- Northern Alignment – The shortest alignment to an existing rail line is to the north in the vicinity of Redlands Boulevard and connecting to the UP Yuma line near the intersection of Redlands Boulevard and San Timoteo Canyon Road, approximately five miles from the project site. This alignment would require extensive ROW acquisition, encounter very serious grade issues that would increase the length of track needed, result in environmental impacts on the Badlands, and require a grade separated crossing of SR-60. The impacts and costs of this approach would be disproportionate to the benefit of removing WLC trucks from the freeways.
- Eastern Alignment – The final possibility would be to connect to the UP Yuma line along an alignment parallel to SR-60. This alignment would connect to the existing rail network near the Morongo Golf Club at Tukwet Canyon, approximately five miles to the east of the WLC site. The eastern alignment would be affected by the same drawbacks as the northern alignment, with the addition of the need to construct a bridge over San Timoteo Creek.

As can be seen from the discussion above, providing rail service to the WLC along any of the possible alignments would in itself create serious environmental impacts.

Relative Costs of Truck and Rail Service. The loading and unloading of rail cargos requires special equipment and handling and can only be performed at specialized places, which adds to the cost of shipping goods by rail. On the other hand, the actual movement of goods by rail is more energy-efficient and less expensive than movement by truck. This combination of relatively high fixed costs at each end of a trip with low variable costs for the distance traveled means rail can be a less expensive way to ship cargo than truck, but only if the shipping distance is sufficiently long.

The break-even distance between rail and truck shipping has been the subject of several studies. The industry rule-of-thumb is that the rail becomes economically viable when cargos are shipped more than 500 miles. For example, the National Rail Plan, a nationwide guiding document from the U.S. Department of Transportation Federal Railroad Administration, has set the freight rail goal to, "Develop strategies to attract 50 percent of all shipments 500 miles or greater to intermodal rail." In addition, the Plan highlights the importance that trucks have in conjunction with rail when moving freight, as trucks "excel in providing time-sensitive delivery services for high-value goods being transported over medium

and short haul distances." A local example is the Ports of Long Beach/Los Angeles Rail Master Planning Study, which indicates that rail loaded with two levels of shipping containers, "traditionally competes well with trucks at distances greater than 500 miles." The San Pedro Bay Ports Rail Market Study shows the break-even point between truck and rail freight transport beginning east of Las Vegas and Phoenix, and north of the Bay Area. For shipments between the Ports of Los Angeles and Long Beach and the WLC, a distance of about 70 miles, shipping by rail would be far more expensive than by truck. Even if a rail line were built to the WLC, it would be uneconomical to use it for trips to and from the ports.

Capacity Constraints in the Rail System. If a rail line could be built to the WLC site and tenants could be induced to use it despite higher costs, this would only be helpful if the regional rail system had sufficient capacity to accommodate WLC freight without detriment to other users.

In fact, there are serious capacity constraints in the rail network in the Los Angeles Basin. Among other things, both BNSF and UP rail operations are already capacity-constrained on the lines between the ports and western Riverside County. Two studies, completed in the early 2000s and using the year 2000 as the existing condition, found that many of the rail lines were already operating near capacity. The studies evaluated 10 and 25 years of projected growth on the network and found that within 10 years (of the date of the study) the network would be over capacity. Without capacity increasing improvements, 10 years of train traffic growth was forecast to increase delay more than six-fold. This did not include additional delays that would be caused by trains serving the WLC.

The Los Angeles-Inland Empire Railroad Main Line Advanced Planning Study from October 2002 found that the "region's rail system is inadequate for forecast train traffic." The study presented other findings that illustrate the near-capacity state of the rail network, for example, "… just 25 percent of the forecast 2010 traffic is sufficient to roughly double the average delay per train, to 67.6 minutes for BNSF freight and 54.4 minutes for UP freight." This occurs because small increases in train traffic result in disproportionate delays as the network nears capacity.

Several minor improvements to the rail network have been made since the 2002 study. However, accommodating estimated future demand in the year 2025 by providing capacity improvements alone would be costly; to meet future demand without rerouting would require capacity of some segments to be increased from two to four tracks. Therefore, an approach has been developed to revise train routing on the existing rail network and make limited capacity-increasing improvements. Even the limited improvements are estimated to cost over $2 billion.

The fact that the rail system has limited capacity to accommodate additional traffic means that potential users have to be prioritized so that the capacity can be allocated efficiently. Highest priority would be for long-distance rail service direct from the ports. Short-distance cargo trips between the ports and the WLC would receive much lower priority than long-distance shipments. If regional passenger trains (e.g., Metrolink) share the tracks with freight trains, as is the case for some lines, then service to WLC would drop even further on the priority list. Based on existing capacity of the rail network and projected growth, the studies indicated that the rail network would be over capacity without further capital investments, which is beyond the scope of the WLC project.

Minimal Reduction in Traffic. Assuming that a rail line could be built to the WLC site and assuming that WLC freight could be accommodated by the rail network and that the costs for these things could be covered by subsidies or by increasing the prices on goods moved through the WLC, the question must be asked, "how much of a reduction in truck traffic impacts would be achieved?"

The answer is, "very little." As was discussed earlier, the economics of freight shipment make rail viable only for trips of 500 miles or more. As is described in the TIA prepare for this EIR (Chapter 12, Section F), between 2 and 7 percent (depending on the year) of the truck trips beginning or ending in WLC go to the ports and these trips have no significant impact on freeway LOS for most of their lengths. So the effect of rail service on reducing truck impacts would be very small.

Conclusions About the Rail Alternative. This analysis of the rail alternative found that bringing rail service to the site would be very costly, result in serious environmental impacts, create major disruption to existing communities, and take many years to design, acquire right-of-way, and construct. Even if a line were built, both economics and system constraints would deter its use for cargos between the WLC and the ports. Even if built and used, rail service would have very little effect on reducing the traffic

impacts of the WLC. Based on these considerations, rail service was not included in the design of the WLC and is not discussed further in this EIR.

4.15.3.4 Year 2025 Conditions

Levels of service are discussed below for year 2025. As noted above, Phase 1 of the proposed project will be completed in 2025 and includes 21,450,000 square feet of logistics warehouse uses. This is approximately 52 percent of the total project building space. The internal road system will be partially built out, with east-west through traffic served by the Cactus Avenue Extension and Streets C and E. World Logistics Center Parkway would serve north-south traffic as it does today. As discussed previously, roadway projects that are either under construction or are funded and planned for implementation in the short-term (i.e., improvement projects on the FTIP and the RTP's Financially Constrained Project list) and therefore reasonably assured of being constructed within the scenario timeframe were added.

Year 2025 Without Project Levels of Service. An intersection level of service analysis was conducted to determine intersection performance under opening year 2025 cumulative conditions. Table 4.15-15 summarizes the levels of service for opening year cumulative conditions at study area intersections. As shown on Table 4.15-15, the number of intersections that exceeded the LOS target in the AM peak hour, PM peak hour, or both, rose from 19 under Existing Conditions to 30 under the 2025 No-Project Scenario due to population and employment growth.. The intersections that were forecast to exceed the City's LOS standards under opening year 2025 cumulative conditions were:

- IN-10 Redlands Blvd/Locust Ave (AM, PM)
- IN-20 Oliver St/Alessandro Blvd. (AM, PM)
- IN-23 Redlands Blvd./Alessandro Blvd. (AM, PM)
- IN-41 Lasselle St/Iris Ave (PM)
- IN-53 Lasselle St./Cactus Ave. (PM)
- IN-65 Perris Blvd./Cactus Ave. (AM, PM)
- IN-66 Alessandro Blvd./Sycamore Canyon Blvd. (AM)
- IN-75 Central Ave./Lochmoor Dr. (AM, PM)
- IN-76 Sycamore Canyon Blvd/Central Ave (AM, PM)
- IN-80 Alessandro Blvd./Mission Grove Pkwy. (AM, PM)
- IN-83 Martin Luther King Blvd./Canyon Crest Dr. (AM, PM)
- IN-85 Martin Luther King Blvd./I-215 NB Ramps (AM, PM)
- IN-86 Central Ave./Chicago Ave. (AM, PM)
- IN-88 Central Ave./Canyon Crest Dr. (PM)
- IN-94 Arlington Ave./Victoria Ave. (AM, PM)
- IN-95 Alessandro Blvd./Chicago Ave. (AM, PM)
- IN-96 Alessandro Blvd./Century Ave. (AM)
- IN-97 Alessandro Blvd./Via Vista Dr. (AM, PM)
- IN-98 Alessandro Blvd./Canyon Crest Dr. (AM, PM)
- IN-107 Evans Rd./Rider St. (AM)
- IN-114 Evans Rd./Orange Ave. (AM, PM)
- IN-123 Gilman Springs Rd./Bridge St. (AM, PM)
- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)
- IN-125 SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. (AM, PM)
- IN-126 Ramona Expy./Sanderson Ave. (AM, PM)
- IN-129 W 6th St/California Ave (PM)

- IN-131 Reche Canyon Rd./Reche Vista Rd. (AM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (AM, PM)
- IN-133 San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- IN-134 Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Table 4.15-15: Year 2025 Without Project Intersection Levels of Service

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		Non-Existent	
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		Non-Existent	
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.0	A	10.3	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		Non-Existent	
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	6.2	A	9.5	A
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	>180	**F**	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	28.5	C	25.0	C
IN-12	Theodore St/Ironwood Ave	D	CSS	9.0	A	8.8	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	26.5	C	23.2	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	10.3	B	19.1	B
IN-15	Theodore St/SR-60 WB ramps	D	CSS	10.4	B	9.3	A
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.7	A	9.5	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	26.1	C	25.1	C
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.5	A	9.5	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	31.9	**D**	27.0	**D**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	15.6	B	17.8	B
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	46.2	**E**	36.2	**E**
IN-24	Oliver St/Cactus Ave	D	SIGNAL	26.2	C	19.7	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	17.1	B	17.5	B
IN-26	Quincy St/Cactus Ave	C	SIGNAL	3.0	A	3.2	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	15.1	C	14.2	B
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	24.7	C	24.7	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	34.3	C	47.3	D
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	30.7	C	21.2	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	22.2	C	23.3	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	25.8	C	42.4	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	17.2	B	19.1	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	18.5	B	19.0	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	9.0	A	8.6	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	37.6	D	20.9	C
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	16.6	B	25.2	C
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	34.8	C	50.4	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	44.3	D	42.3	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	24.5	C	22.9	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	39.6	D	58.7	**E**
IN-42	Nason St/Iris Ave	C	SIGNAL	18.0	B	19.4	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	28.6	C	25.7	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	12.3	B	11.8	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	37.0	D	35.9	D
IN-46	Kitching St/Krameria Ave	D	SIGNAL	21.0	C	18.7	B
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	23.9	C	24.2	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	26.2	C	24.8	C

Table 4.15-15: Year 2025 Without Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	22.1	C	22.3	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	9.0	A	6.6	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	25.2	C	23.0	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	28.7	C	24.2	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	30.3	C	36.9	**D**
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	34.8	C	32.9	C
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	27.9	C	42.2	D
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	26.0	C	49.7	D
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	30.1	C	34.5	C
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	23.2	C	32.0	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	38.6	D	40.4	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	11.5	B	10.2	B
IN-62	Graham St/Cactus Ave	D	SIGNAL	22.3	C	23.6	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	52.4	D	52.3	D
IN-64	Indian St/Cactus Ave	C	SIGNAL	30.5	C	30.9	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	79.0	**E**	42.0	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	61.2	**E**	42.0	D
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	5.4	A	10.3	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	29.0	C	15.6	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	32.6	C	22.7	C
IN-70	Day St/Alessandro Blvd	D	SIGNAL	15.7	B	15.0	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	20.6	C	22.1	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	4.4	A	24.8	C
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	46.7	D	13.2	B
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	27.9	C	34.7	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	72.9	**E**	72.3	**E**
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	63.6	**E**	83.8	**F**
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	9.1	A	23.5	C
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	24.0	C	9.1	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	37.7	D	22.7	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	72.1	**E**	56.9	**E**
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	32.8	C	54.3	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	23.9	C	13.7	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	107.5	**F**	57.3	**E**
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	23.5	C	7.9	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	45.2	**E**	>180	**F**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	>180	**F**	>180	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	25.2	C	33.6	C
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	44.6	D	88.1	**F**
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	9.3	A	9.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	26.1	C	42.6	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	13.0	B	27.7	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	34.5	C	53.5	D
IN-93	Horace St/Arlington Ave	D	SIGNAL	24.3	C	11.5	B
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	175.9	**F**	>180	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	122.6	**F**	151.6	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	133.9	**F**	19.8	B

Table 4.15.15: Year 2025 Without Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	120.7	**F**	114.3	**F**
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	60.9	**E**	85.6	**F**
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	37.5	D	37.5	D
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	24.0	C	62.8	E
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	46.0	D	27.2	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	59.4	E	68.1	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	6.7	A	15.5	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.8	C	24.7	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	25.6	C	18.4	B
IN-107	Evans Rd/Rider St	C	SIGNAL	40.1	**D**	30.2	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	40.4	D	35.2	D
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	>180	**F**	>180	**F**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	33.5	C	30.4	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		Non-Existent	
IN-123	Gilman Springs Rd/Bridge St	C	CSS	>180	**F**	>180	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	>180	**F**	>180	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	>180	**F**	>180	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	88.9	**F**	97.4	**F**
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	24.7	C	37.1	**D**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	15.6	B	20.2	C
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	51.4	**D**	21.3	C
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	>180	**F**	171.9	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	>180	**F**	>180	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	>180	**F**	>180	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	19.6	C	20.3	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.8	B	11.1	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Source: Traffic Impact Analysis Report for the World Logistics Center, Parsons Brinckerhoff, September 2014.

The year 2025 without project roadway levels of service are based on daily V/C ratios for the study area roadway segments. Table 4.15-16 summarizes the results of this analysis and shows all segments would meet the general plan LOS target.

Table 4.15-16: Year 2025 Without Project Roadway Levels of Service

Roadway		From	To	LOS Standard*	Roadway Section**	Daily Volume	LOS
S-1	Theodore St	SR-60 WB Ramps	Ironwood Ave	D	4U	1,174	A
S-2	World Logistics Center Pkwy (A)	SR-60 EB Ramps	Eucalyptus Ave	D	2U	2,246	A
S-3	Eucalyptus Ave	Redlands Blvd	World Logistics Center Pkwy (A)	D	2U***	906	A
S-4	Eucalyptus Ave (Street B)	World Logistics Center Pkwy (A)	Gilman Springs Rd	N/A	Future Road		
S-5	World Logistics Center Pkwy (A)	Eucalyptus Ave	Street E/Street F	D	2U	1,120	A
S-6	Street E	World Logistics Center Pkwy (A)	Cactus Ave Extension	N/A	Future Road		
S-7	Street F	World Logistics Center Pkwy (A)	Alessandro Blvd (Street C)	N/A	Future Road		
S-8	World Logistics Center Pkwy (A)	Street E/Street F	Alessandro Blvd (Street C)	D	2U	1,120	A
S-9	Alessandro Blvd (Street E)	Merwin Street	World Logistics Center Pkwy (A)	D	2U	3,524	A
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave	N/A	Future Road		
S-11	Alessandro Blvd (Street C)	World Logistics Center Pkwy (A)	Street F	D	2U	2,801	A
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,801	A
S-14	Alessandro Blvd	Moreno Beach Dr	Redlands Blvd	D	4U	5,484	A
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	D	6D	22,365	C
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	6D	20,260	C
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	D	4U	16,194	B
S-19	Redlands Blvd	Eucalyptus Ave	Alessandro Blvd	C	4U	11,586	A
S-20	Alessandro Blvd	Redlands Blvd	Merwin St	C	2U	5,885	A
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave	C	4U	10,282	A
S-22	Cactus Ave	Redlands Blvd	Cactus Ave Extension	C	2U***	990	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

A freeway segment level of service analysis was conducted to determine freeway performance under year 2025 conditions. Table 4.15-17 summarizes the levels of service at study area segments under year 2025 no project conditions. As shown in Table 4.15-17, the following 40 study freeway segments are forecast to operate at an unsatisfactory level of service during either the a.m. or p.m. peak hour:

North or Eastbound

- SR-60 Ramona Ave. to Central Ave. (AM, PM)
- SR-60 Central Ave. to Mountain Ave. (AM, PM)
- SR-60 Mountain Ave. to Euclid Ave. (AM, PM)
- SR-60 Euclid Ave. to Grove Ave. (AM, PM)
- SR-60 Grove Ave. to Vineyard Ave. (PM)
- SR-60 Vineyard Ave. to Archibald Ave. (PM)
- SR-60 Rubidoux Blvd. to Market St. (PM)
- SR-60 Market St. to Main St. (AM, PM)
- SR-60 Martin Luther King Blvd. to Central Ave. (AM, PM)
- SR-60 Pigeon Pass Rd. to Heacock St. (PM)
- SR-91 McKinley St. to Pierce St. (PM)
- SR-91 Pierce St. to Magnolia Ave. (AM, PM)
- SR-91 Tyler St. to Van Buren Blvd. (PM)
- SR-91 Adams St. to Madison St. (AM, PM)

- SR-91 Central Ave. to 14th St. (AM, PM)
- I-215 Barton Rd. to Mt. Vernon Ave./Washington St. (AM, PM)
- I-215 Auto Plaza Dr. to Mill St. (PM)

Southbound or Westbound

- SR-60 Euclid Ave. to Grove Ave. (PM)
- SR-60 Grove Ave. to Vineyard Ave. (PM)
- SR-60 Vineyard Ave. to Archibald Ave. (AM, PM)
- SR-60 Valley Way to Rubidoux Blvd. (PM)
- SR-60 Rubidoux Blvd. to Market St. (PM)
- SR-60 Market St. to Main St. (AM)
- SR-60 Main St. to SR-91 (AM)
- SR-60 Martin Luther King Blvd. to Central Ave. (AM, PM)
- SR-60 Fair Isle Dr./Box Springs Rd. to I-215 (PM)
- SR-60 I-215 to Day St. (AM)
- SR-60 Pigeon Pass Rd. to Heacock St. (AM)
- SR-91 McKinley St. to Pierce St. (AM, PM)
- SR-91 Pierce St. to Magnolia Ave. (AM, PM)
- SR-91 Magnolia Ave. to La Sierra Ave. (AM, PM)
- SR-91 La Sierra Ave. to Tyler St. (AM, PM)
- SR-91 Tyler St. to Van Buren Blvd. (PM)
- SR-91 Van Buren Blvd. to Adams St. (PM)
- SR-91 Adams St. to Madison St. (PM)
- SR-91 Madison St. to Arlington Ave. (AM, PM)
- I-215 Harley Knox Blvd. to Van Buren Blvd. (PM)
- I-215 Center St. to La Cadena Dr. (AM, PM)
- I-215 La Cadena Dr. to Barton Rd. (AM, PM)
- I-215 Barton Rd. to Mt. Vernon Ave. (PM)

Table 4.15-17: Year 2025 Without Project Freeway Mainline Levels of Service

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,520	29.7	D	6,580	28.2	D	6,700	26.6	D	6,540	26.5	D
F-3	SR-60	Ramona Ave to Central Ave	8,600	43.5	**E**	9,500	48.5	**F**	6,250	24.9	C	6,780	28.0	D
F-4	SR-60	Central Ave to Mountain Ave	7,710	35.2	**E**	8,390	37.3	**E**	6,850	29.0	D	6,860	29.3	D
F-5	SR-60	Mountain Ave to Euclid Ave	8,040	38.0	**E**	8,390	37.3	**E**	6,970	29.5	D	7,260	31.7	D
F-6	SR-60	Euclid Ave to Grove Ave	7,960	37.3	**E**	8,560	38.7	**E**	7,250	30.4	D	7,930	35.6	**E**
F-7	SR-60	Grove Ave to Vineyard Ave	7,320	32.2	D	9,460	48.0	**F**	6,820	27.1	D	9,890	58.8	**F**
F-8	SR-60	Vineyard Ave to Archibald Ave	7,210	31.2	D	9,610	49.9	**F**	7,980	36.2	**E**	9,930	62.2	**F**
F-9	SR-60	Archibald Ave to Haven Ave	7,290	32.0	D	6,980	27.8	D	See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	8,240	28.2	D	7,640	23.5	C	7,510	23.0	C	6,280	19.4	C
F-11	SR-60	Milliken Ave to I-15	4,670	18.6	C	5,430	20.5	C	5,640	21.6	C	5,880	23.0	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,210	16.7	B	4,820	18.0	B	5,200	15.7	B	5,290	16.3	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	3,640	14.4	B	3,970	14.9	B	5,480	20.9	C	6,690	27.5	D
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	3,120	12.6	B	3,430	13.1	B	4,790	18.2	C	5,670	22.4	C
F-15	SR-60	Pedley Rd to Pyrite St	3,290	13.2	B	3,760	14.3	B	4,760	18.1	C	5,670	22.4	C
F-16	SR-60	Pyrite St to Valley Way	3,940	15.8	B	4,170	15.8	B	4,940	18.8	C	5,650	22.3	C
F-17	SR-60	Valley Way to Rubidoux Blvd	5,110	29.1	D	5,840	32.7	D	5,170	27.7	D	5,930	35.7	**E**
F-18	SR-60	Rubidoux Blvd to Market St	5,320	30.9	D	6,110	35.6	**E**	5,340	28.6	D	6,210	38.2	**E**
F-19	SR-60	Market St to Main St	5,780	35.5	**E**	6,910	45.6	**F**	7,070	48.8	**F**	5,810	34.2	D
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			7,450	56.0	**F**	4,820	26.1	D
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,930	74.8	**F**	10,270	66.4	**F**	7,770	38.8	**E**	7,500	35.8	**E**
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	5,300	21.0	C	6,590	25.5	C	7,540	31.6	D	8,230	38.5	**E**
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			4,740	50.7	**F**	3,260	26.9	D
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,020	25.3	C	5,100	59.6	**F**	5,080	59.8	**F**	2,860	22.7	C
F-30	SR-60	Heacock St to Perris Blvd	2,770	22.5	C	3,740	30.5	D	3,730	31.3	D	3,160	25.6	C
F-31	SR-60	Perris Blvd to Nason St	2,530	20.2	C	3,410	26.7	D	3,340	26.2	D	2,920	23.2	C
F-32	SR-60	Nason St to Moreno Beach Dr	2,270	12.1	B	3,140	15.5	B	See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	2,120	11.3	B	2,910	14.4	B	2,780	21.4	C	2,410	18.8	C
F-34	SR-60	Redlands Blvd to Theodore St	1,800	9.6	A	2,790	13.8	B	2,500	12.7	B	2,050	10.7	A
F-35	SR-60	Theodore St to Gilman Springs Rd	1,930	7.7	A	3,050	11.3	B	2,530	9.7	A	2,040	8.0	A
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,380	8.0	A	2,220	11.5	B	1,810	10.1	A	1,580	9.0	A
F-37	SR-60	Jack Rabbit Trail to Potero Blvd	1,500	12.1	B	2,270	16.8	B	1,460	11.5	B	1,390	11.1	B
F-38	SR-60	Potero Blvd to I-10	1,420	11.5	B	1,340	10.0	A	1,940	14.4	B	1,720	13.3	B
F-39	SR-91	I-15 to McKinley St	4,670	17.5	B	6,840	28.9	D	6,700	27.0	D	7,610	34.7	D
F-40	SR-91	McKinley St to Pierce St	5,230	27.9	D	5,840	35.5	**E**	7,250	53.3	**F**	7,330	62.3	**F**
F-41	SR-91	Pierce St to Magnolia Ave	6,760	44.9	**E**	7,590	68.9	**F**	7,260	52.2	**F**	7,260	57.8	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			7,410	55.1	**F**	7,330	59.6	**F**
F-43	SR-91	La Sierra Ave to Tyler St	7,390	30.6	D	7,530	33.8	D	6,320	38.3	**E**	7,390	61.1	**F**
F-44	SR-91	Tyler St to Van Buren Blvd	7,410	30.5	D	8,330	40.3	**E**	6,470	25.4	C	8,280	39.8	**E**
F-45	SR-91	Van Buren Blvd to Adam St	4,950	18.6	C	5,280	20.8	C	6,760	27.0	D	8,230	39.3	**E**
F-46	SR-91	Adam St to Madison St	7,670	63.0	**F**	8,550	120.9	**F**	6,320	24.7	C	7,790	35.5	**E**

Table 4.15-17: Year 2025 Without Project Freeway Mainline Levels of Service (Continued)

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,840	34.2	D	5,710	23.1	C	7,440	55.8	**F**	7,240	56.6	**F**
F-49	SR-91	Central Ave to 14th St	7,300	56.6	**F**	6,200	40.8	**E**	5,650	21.6	C	7,260	31.3	D
F-50	SR-91	14th St to University Ave	4,820	18.0	B	4,600	17.9	B	5,650	21.6	C	7,260	31.3	D
F-51	SR-91	University Ave to Spruce St	6,140	18.5	C	5,880	18.5	C	See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	3,430	13.5	B	4,650	17.4	B	3,030	11.3	B	2,500	9.3	A
F-67	I-215	Gambroni Rd to Newport Rd	3,150	12.4	B	4,140	15.5	B	2,990	11.2	B	2,930	10.9	A
F-68	I-215	Newport Rd to McCall Blvd	2,500	9.9	A	3,040	11.4	B	3,170	11.9	B	3,680	13.6	B
F-69	I-215	McCall Blvd to Ethanac Rd	3,110	12.3	B	4,290	16.1	B	3,170	11.9	B	3,680	13.6	B
F-70	I-215	Ethanac Rd to SR-74	4,230	16.7	B	4,070	15.2	B	3,700	13.9	B	4,350	16.1	B
F-71	I-215	SR-74 to Redlands Ave	3,600	14.4	B	4,910	18.6	C	5,200	19.8	C	5,000	18.7	C
F-86	I-215	Redlands Blvd to D St	4,810	19.0	C	4,010	15.1	B	3,160	11.9	B	2,640	9.8	A
F-87	I-215	D St to Nuevo St/Harvil Ave	4,100	12.9	B	5,590	16.8	B	4,020	12.1	B	3,250	9.7	A
F-88	I-215	Nuevo St to Mid-County Pkwy	4,110	13.1	B	4,960	15.0	B	4,430	13.4	B	4,080	12.3	B
F-89	I-215	Mid-Count Pkwy to Ramona Expy	4,970	15.8	B	5,850	17.7	B	4,830	14.6	B	5,980	17.8	B
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox Blvd	4,440	14.2	B	5,920	17.9	B	2,790	8.5	A	5,460	16.3	B
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	4,570	25.2	C	4,230	22.0	C	3,770	19.8	C	6,720	42.4	**E**
F-92	I-215	Van Buren Blvd to Cactus Ave	4,860	19.4	C	4,320	16.3	B	4,000	15.1	B	6,260	24.1	C
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,470	24.6	C	5,380	29.5	D	5,410	29.5	D	5,950	34.0	D
F-95	I-215	Eucalyptus Ave to SR-60	4,730	26.5	D	5,960	34.7	D	See Weaving Analysis			See Weaving Analysis		
F-74	I-215	Columbia Ave to Center St	6,970	30.6	D	7,380	30.6	D	7,630	33.2	D	7,220	29.4	D
F-75	I-215	Center St to La Cadena Dr	5,390	31.9	D	5,620	31.1	D	7,710	64.0	**F**	7,280	51.2	**F**
F-76	I-215	La Cadena Dr to Barton Rd	5,470	32.4	D	5,400	29.2	D	7,720	64.3	**F**	7,400	52.7	**F**
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,930	37.9	**E**	6,150	36.7	**E**	6,570	41.4	**E**	7,460	53.9	**F**
F-78	I-215	Mt. Vernon Ave to I-10	6,380	27.5	D	6,370	25.2	C	6,350	25.1	C	5,840	22.3	C
F-80	I-215	Auto Plaza Dr to Mill St	5,470	22.0	C	9,900	54.7	**F**	6,460	25.4	C	6,020	22.8	C
F-83	I-215	Baseline Rd to Highland Ave	3,230	12.8	B	5,020	18.8	C	4,930	18.5	C	3,740	13.9	B
F-52	I-10	SR-60 to Beaumont Ave	4,100	16.1	B	5,400	21.1	C	5,750	25.3	C	5,190	19.6	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,210	16.8	B	5,850	23.6	C	5,880	26.4	D	5,330	20.4	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,400	17.4	B	6,080	24.7	C	6,330	29.3	D	5,480	21.1	C
F-55	I-10	Highland Springs Ave to Sunset Ave	4,320	17.2	B	5,930	24.0	C	5,810	26.0	D	5,150	19.8	C
F-56	I-10	Sunset Ave to 22nd St	4,220	13.4	B	5,700	17.9	B	5,580	19.1	C	5,060	15.5	B
F-57	I-10	22nd St to 8th St	4,120	16.4	B	5,560	22.2	C	5,460	24.0	C	4,960	19.0	C
F-58	I-10	8th St to Hargrave St	4,110	16.4	B	5,490	21.9	C	5,390	23.6	C	4,980	19.1	C
F-59	I-10	Hargrave St to Fields Rd	3,790	15.1	B	4,970	19.7	C	4,830	20.9	C	4,660	17.8	B
F-60	I-10	Fields Rd to Morongo Trail	3,630	14.5	B	4,740	18.7	C	4,620	19.9	C	4,560	17.4	B
F-61	I-10	Morongo Trail to Main St	3,260	12.9	B	4,250	16.5	B	4,110	17.4	B	4,150	15.6	B
F-62	I-10	Main St to Haugen-Lehmann Way	3,290	12.9	B	4,260	16.5	B	4,100	17.4	B	4,200	15.8	B
F-64	I-10	SR-111 to Tipton Rd	2,870	11.3	B	3,710	14.4	B	3,570	15.2	B	3,570	13.4	B
F-65	I-10	Tipton Rd to SR-62	2,740	10.8	A	3,740	14.5	B	3,590	15.2	B	3,580	13.5	B

Indicates that the LOS exceeds the target level

A freeway weaving analysis was conducted on freeway segments where an on-ramp is closely followed by an off-ramp, and the two are joined by an auxiliary lane. Table 4.15-18 summarizes the levels of service at weaving segments under 2025 conditions. As shown on Table 4.15-18, the following thirteen sections are forecast to operate at unsatisfactory levels of service in either the a.m. peak or p.m. peak hour:

North or Eastbound

- SR-60 from Main St. to SR-91 (AM, PM)
- SR-60 from SR-91 to Blaine St./3rd St. (PM)
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd. (PM)
- SR-60 from I-215 to Day St. (PM)
- SR-60 from Day St. to Pigeon Pass Rd./Frederick St. (PM)
- SR-91 from Magnolia Ave. to La Sierra Ave. (PM)
- I-215 from I-10 to Auto Plaza Dr./Orange Show Rd. (PM)

South or Westbound

- SR-60 from Haven Ave. to Archibald Ave. (PM)
- SR-60 from University Ave. to Martin Luther King Blvd. (AM, PM)
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd. (AM, PM)
- SR-91 from Arlington Ave. to Central Ave. (AM, PM)
- SR-91 from SR-60 to Mission Inn Ave./University Ave. (PM)
- I-215 from SR-60 to Columbia Ave. (AM, PM)

Table 4.15-18: Year 2025 Without Project Freeway Weaving Levels of Service

ID	Freeway	Weaving Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,820	23	C	6,930	26	C	5,570	20.1	C	6,240	22.9	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			6,840	27.1	C	8,360	35.6	**E**
W-20	SR-60	Main St to SR-91	7,350	37.6	**E**	7,570	37.4	**E**	See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	6,600	27.1	C	9,810	43.8	**F**	6,460	24.6	C	6,350	24.4	C
W-22	SR-60	Blaine St/3rd St to University Ave	6,460	25.4	C	7,490	31.3	D	7,390	25.8	C	7,010	25.8	C
W-23	SR-60	University Ave to Martin Luther King	6,400	24.7	C	7,750	27.4	C	7,710	42.4	**E**	7,610	> Capacity	**F**
W-25	SR-60	Central Ave to Pall Isle Dr/Box Springs Rd	6,480	27.4	C	9,050	35.6	**E**	7,900	39.1	**E**	7,550	38.0	**E**
W-27	SR-60	I-215 to Day St	3,320	12.9	B	10,550	47.4	**F**	See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,400	15.4	B	7,590	35.6	**E**	5,080	34.3	D	3,460	21.9	C
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			2,720	15.1	B	2,340	13.2	B
W-35	SR-61	Theodore St to Gilman Springs Rd	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-42	SR-91	Magnolia Ave to La Sierra Ave	7,320	34.2	D	7,590	38.0	**E**	See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,300	27.8	C	5,250	20.6	C	7,550	36.4	**E**	7,320	38.0	**E**
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			8,690	31.7	D	12,040	> Capacity	**F**
W-93	I-215	Cactus Ave to Alessandro Blvd	4,500	23.4	C	5,370	25.1	C	5,490	23.8	C	6,300	26.9	C
W-95	I-215	Eucalyptus Ave to SR-60	See Basic Analysis			See Basic Analysis			6,110	22.0	C	6,800	25.8	C
W-73	I-215	SR-60 to Columbia Ave	4,590	25.2	C	4,680	23.9	C	7,530	38.0	**E**	7,240	36.0	**E**
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,570	24.5	C	9,930	37.5	**E**	6,750	23.5	C	6,540	23.0	C
W-81	I-215	Mill St to 2nd St	6,060	23.0	C	7,480	28.4	D	7,430	26.0	C	6,600	23.4	C
W-82	I-215	5th St to Baseline Rd	4,370	12.9	B	7,510	23.4	C	7,460	23.9	C	5,970	18.7	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,280	11.2	B	4,260	14.4	B	4,100	16.0	B	4,190	16.2	B

Indicates that the LOS exceeds the target level

Freeway ramp merge and diverge operations have been evaluated for year 2025 conditions. Table 4.15-19 summarizes the levels of service under year 2025 no project conditions and shows the following freeway ramp junction is forecast to operate at unsatisfactory levels of service in either the a.m. peak or p.m. peak hour:

- SR-60 eastbound On-Ramp from Martin Luther King Blvd (a.m./p.m.).

Table 4.15-19: Year 2025 Without Project Freeway Freeway Ramp Levels of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	9,500	430	41.9	**F**	9,220	1,050	39.9	**F**
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,960	520	15.6	B	7,620	1,430	25.3	C
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	2,120	570	6.2	A	2,910	860	10.3	B
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,680	120	9.1	A	2,470	320	13.8	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,800	90	12.3	B	2,790	70	17.0	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,870	60	7.3	A	2,940	110	12.2	B
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,930	340	7.2	A	3,050	760	13.5	B
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,370	10	9.9	A	2,210	10	13.5	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	1,810	10	14.1	B	1,580	50	13.0	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	2,010	520	10.6	B	1,650	390	7.9	A
R-13	SR-60 WB	Off-Ramp to Theodore St	1	2,530	90	7.0	A	2,040	40	4.4	A
R-14	SR-60 WB	On-Ramp from Theodore St	1	2,430	70	12.9	B	1,990	60	10.9	B
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	2,500	220	7.1	A	2,050	150	4.6	A
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	2,090	690	15.2	B	1,810	600	13.3	B
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,900	710	5.9	A	7,550	540	5.3	A
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,770	650	25.2	C	7,500	1,010	27.6	C

Indicates that the LOS exceeds the target level

Source: Traffic Impact Analysis Report for the World Logistics Center, Parsons Brinckerhoff, September 2014.

4.15.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, the proposed project would create potentially significant traffic impacts if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit.
- Cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the without project condition. The adopted LOS standards are as follows:

  - Roadway segments and intersections: LOS C; and LOS D as outlined in previously referenced Table 4.15.E.
  - Freeway mainline: LOS D.
  - Freeway Ramp Merge/Diverge: LOS D.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks.
- Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Moreno Valley General Plan Circulation Element, adopted July 2006, defines a preferred performance standard of LOS C (where feasible) for City roads (including intersections). However, the circulation element also allows peak hour levels of service in the LOS D range at certain locations. These locations include areas of high employment concentration or north/south roads in the vicinity of the SR-60. Therefore, if a roadway segment or intersection is projected to operate at an acceptable level of service (i.e., LOS C/D or better) without the project, and the project is expected to cause the intersection to operate at an unacceptable level of service, the project impact is considered significant.

The study area includes intersections and roadways in six cities besides Moreno Valley. Table 4.15.20 shows the various level of service standards for intersections within each jurisdiction. A project's impact on an intersection is considered significant if it causes the LOS to exceed the target level set by the jurisdiction or, if the LOS in the no project condition already exceeds the LOS level, if the project causes an increase in traffic delay beyond the no project condition.

Table 4.15-20: Intersection LOS Standards by Jurisdiction

Jurisdiction	Type of Facility	# of Study Intersections	LOS Standard	Source
Moreno Valley	Intersections adjacent to freeways or employment centers	57	D	Moreno Valley General Plan, Chapter 5: Circulation element; Adopted July 2006
	All other intersections	14	C	
Beaumont	Intersections (during peak hours)	4	D	City of Beaumont General Plan; Section 3.0: Circulation Element; Approved March 2007
Perris	Intersections with SR-74, Ramona Exp, or I-215	5	E	City of Perris General Plan, Circulation Element; Amended August 2008
	All other intersections	16	D	
Redlands	Intersections currently operating at "D" or worse	1	Existing LOS	City of Redlands General Plan 2035, Chapter 5: Connected City; Adopted December 2017
	All other intersections	2	C	
Riverside (County)	Intersections in area plans near WLC*	9	D	County of Riverside General Plan, Chapter 4: Circulation Element; Revised December 2016
Riverside (City)	Intersections of collectors or higher roads	27	D	
San Jacinto	Arterial intersections	1	D	San Jacinto General Plan, Circulation Element; Adopted May 2006
Caltrans	State highway facilities currently operating at LOS "E" or "F"		Existing Density	Guide for the Preparation of Traffic Impact Studies, Chapter I; December 2002
	State highway facilities		D	

* LOS D applies to all development proposals located within any of the following Area Plans: Eastvale, Jurupa, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, Western Coachella Valley and those Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans. LOS C applies at all other locations in unincorporated Riverside County.

All freeway mainline segments and freeway ramps are under the jurisdiction of Caltrans. LOS D has been established by Caltrans as the operating standard for freeway mainline segments and freeway ramps. Therefore, if a freeway segment is projected to operate at an acceptable level of service (i.e., LOS D or better) without the project, and the project is expected to cause the facility to operate at an unacceptable level of service (i.e., LOS E or F), the impact is considered significant. Previously referenced Table 4.15.E shows level of service criteria for freeway segments and ramps.

4.15.5 Less than Significant Impacts

Air traffic patterns, design hazard features, emergency access, and alternative transportation policies, plans, or programs are considered to have either no impact or less than significant impacts.

4.15.5.1 Air Traffic Patterns

Threshold	Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Airport facilities within the vicinity of the project site include the March Air Field, which is part of the March Air Reserve Base (MARB). The MARB encompasses approximately 6,500 acres of the Air Force Reserve's 452nd Air Mobility Wing, which provides host base support for numerous tenant active military units. It is also the home of 4th Air Force and multiple units of the California Air National Guard. When March Air Force Base (March AFB) was converted from an active duty base to a Reserve Base in 1996, the decision resulted in approximately 4,400 acres of property and facilities being declared surplus and available for disposal actions, as well as joint use of the airfield. With the realignment of March AFB, the MARB Redevelopment Project Area was established. The MARB Redevelopment Project Area includes the entire 6,500-acre former active duty base area, and approximately 450 acres adjacent to the base in the industrial area of the City of Moreno Valley.

To implement the MARB Redevelopment Project Area and to facilitate the transition of a portion of the MARB from military to civilian uses, the March Joint Powers Authority, (March JPA) consisting of the

County of Riverside and the Cities of Moreno Valley, Perris, and Riverside, was formed. The March JPA along with the U.S. Air Force pursued the establishment of March Air Field as a joint use airport.

The Air Force defines a "joint use airport" as one where the facilities which are owned and operated by the Air Force are made available for use by civil aviation. A joint use agreement between these parties was executed May 7, 1997, along with land leases for over 300 acres as the civilian airport name MIP. Under the agreement, the civilian (March JPA) and the military (AFRC) entities share essential aviation facilities such as the control towers and runways, as well as maintenance of facilities, under this joint use arrangement. Under the provisions of the Joint Use Agreement, the MIP is the civilian facility that is managed and operated by the MIP Airport Authority (MIPAA). The MIP includes air cargo operations such as the March Global Port, a 350-acre commercial air cargo and distribution center.

The Department of the Defense (Air Force) completed an Air Installation Compatible Use Zone (AICUZ) study for MARB in 1998. The AICUZ study was designed and is intended to aid in the development of compatible land uses in non-government areas surrounding military airfields to protect public safety and health. The study established three zones based on potential crash patterns: a Clear Zone and two Accident Potential Zones (APZs). The Clear Zone reaches from along the extended runway centerline to a distance of 3,000 feet, APZ 1 extends from 3,000 feet to 8,000 feet, and APZ II extends from 8,000 feet to 15,000 feet. According to the AICUZ, outside of the Clear Zone and APZs “the risk of aircraft accidents is not significant enough to warrant special consideration in land use planning.” The proposed project site is not located within a Clear Zone, APZ 1, or APZ 2 for MARB as designated by the Air Force 2005 AICUZ Study. In addition to the AICUZ, Airport Influence Area boundaries around MARB have been adopted by County of Riverside Airport Land Use Commission (ALUC) in its Airport Land Use Plan (ALUP). The proposed project site is located within Influence Area III.

The project site is approximately 1.5 miles east of the March Air Field and is entirely within Airport Influence Area III of the MIP. As part of the standard process for development within Airport Influence Areas for MARB, proposed projects are required to be reviewed by the ALUC for consistency with the ALUP. As a standard condition imposed during ALUC reviews, development located within the boundaries of Influence Area III is required to provide navigation easements. Development that is allowed to occur within Airport Influence III of the MIP would not include any features that would alter air traffic patterns or the level of air traffic at the MIP; therefore, a less than significant air safety impact would occur and no mitigation is required.

4.15.5.2 Design Hazard Features

Threshold	Would the proposed project substantially increase hazards due to a design feature or incompatible use?

The design of roadways must provide adequate sight distance and traffic control measures. This provision is normally realized through roadway design to facilitate roadway traffic flows. Roadway improvements in and around the project site would be designed and constructed to satisfy all City and Caltrans requirements for street widths, corner radii, intersection control as well as incorporate design standards tailored specifically to project access requirements. Adherence to applicable City requirements would ensure the proposed project would not include any sharp curves or dangerous intersections.

Temporary impacts associated with the construction of infrastructure improvements included as a part this project may temporarily restrict vehicular traffic or cause temporary hazards. The construction of infrastructure would coincide with roadway improvements, which would include road or lane closures as well as the presence of construction workers and equipment on public roads. Construction operations would be required to implement adequate measures to facilitate the passage of people and vehicles through/around any required road or lane closures. Site-specific activities, such as temporary construction activities, are finalized on a project-by-project basis by the City and are required to ensure

adequate traffic flow. At the time of approval of any site-specific plans required for the construction of infrastructure as a part of typical conditions of approval, the project would be required to implement measures that would maintain traffic flow and access. In the absence of a roadway design hazard, no impact would occur; therefore, no mitigation is required.

An analysis of safety impacts resulting from potential conflicts between project traffic and local schools was performed for this EIR. As identified in the project TIA (Appendix F), the project would not produce a significant safety risk and appropriate safety features are already present on roads near local schools. Other than Perris Boulevard, which would experience a small number of project trucks (22 and 25 medium and heavy duty trucks in the a.m. and p.m. peak hours, respectively), none of the other truck routes would result in project trucks traveling near local schools. The safety impact of project-related passenger cars along streets near local schools was also evaluated by reviewing existing pedestrian facilities and collecting pedestrian counts at the intersections along project truck routes. All pedestrian crossings at signalized intersections near schools are protected. Crosswalks near schools are striped in yellow (per the California Manual on Traffic Control Devices page 1,282). In most cases, sidewalks exist along roadways and lead to the striped, protected crosswalks at the intersections. Intersection and roadway features along project truck routes were reviewed and it was determined that adequate pedestrian amenities already exist in the form of protected crossings, crosswalks, curb ramps, and pedestrian signals. For these reasons, project passenger cars and trucks would not create unsafe conflicts with pedestrians.

4.15.5.3 Emergency Access

Threshold	Would the proposed project result in inadequate emergency access?

Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate measures to facilitate the passage of people and vehicles through/around any required road closures. Site-specific activities such as temporary construction activities are finalized on a project-by-project basis by the City and are required to ensure adequate emergency access.

The roadway improvements that will take place as a part of this project will improve the traffic circulation in the area. For example, emergency vehicles that currently pass through the site using either World Logistics Center Parkway or Alessandro Boulevard would continue to have those routes available to them, and these roads will be upgraded to arterial standards within the proposed project limits. Access to Alessandro Boulevard would be provided by a connection to Redlands Boulevard at Cactus Avenue instead, of a direct extension to Alessandro Boulevard. The change would not lengthen the distance between Gilman Springs Road and the Riverside Community Regional Medical Center on Cactus Avenue or the route to and from the Kaiser Moreno Valley Community Hospital on Iris Avenue. The extension of Eucalyptus Avenue through the project area would improve access between the project site and the nearest existing fire station (the Moreno Beach fire station). As a condition of approval, the proposed project will also be required to construct a fire station on site.

These improvements would enhance the ability of emergency vehicles to access the project as well as the surrounding properties. Access to the project site is designed to accommodate large trucks with trailers used for the distribution of goods to and from the warehouses. This would provide ample vehicular access for emergency vehicles. During the operational phase of the proposed project, on-site access would be required to comply with standards established by the City Public Works Department. The size and location of fire suppression facilities (e.g., hydrants) and fire access routes would be required to conform to Fire Department standards. As required of all development in the City, the operation of the proposed project would conform to applicable Uniform Fire Code standards. The submittal of such plans would be considered a condition of approval, which would be part of the permitting process initiated by the applicant and approved by the City in accordance with City standards. As with any development, access to and through the project would be required to comply with the required street widths, as determined in the California Building Code (CBC), Master Plan of Streets, and the Uniform Fire Code. Therefore, implementation of the proposed project would not

significantly impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, no mitigation is required.

4.15.5.4 Alternative Transportation Policies, Plans, or Programs

Threshold	Would the proposed project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The proposed project would result in the development of employment opportunities and would therefore reduce vehicle miles traveled. Currently, approximately 70 percent of workers residing in the City of Moreno Valley commute to jobs outside the City. According to the U.S. Census Bureau, 21.7 percent of Moreno Valley workers commute more than 50 miles one-way to work, and another 20.8 percent drive 25 to 50 miles one way. Nearly four out of five Moreno Valley workers drive to work alone. The City is in need of employment opportunities to serve City and regional residents. A better jobs/housing balance results in shorter commute times, reduced vehicle miles traveled, and reduced traffic congestion. Locating jobs in areas such as the City is a public policy prerogative of the City, regional governmental entities such as SCAG, and the State of California as manifested by recent legislation such as SB 375. The project is consistent with these policies because it will provide approximately 20,000[1] new jobs; nearly doubling the number of jobs in Moreno Valley. As a result, the percentage of Moreno Valley residents that need to commute regionally would be reduced.

An updated Housing Element, adopted by the City in February 2011, identified the Moreno Highlands area as a potential location for future jobs-producing land uses. In April 2011, the City adopted its Economic Development Action Plan, which identified eastern Moreno Valley as a potential area for major job-producing land uses. The proposed World Logistics Center project is consistent with this planning objective, as it provides a comprehensive plan for jobs-producing land uses.

The WLC Specific Plan provides for Class II bicycle lanes on all project streets (see WLCSP Section 3.4.3 and WLCSP Figure 3-18). In addition, WLCSP Section 6.0, Sustainability, Item 2 indicates showers and changing rooms will be available which will facilitate people using bicycles to get to and from work.

As stated previously, the proposed project would generate jobs for approximately 20,000 employees working in the eastern portion of the City that would help reduce the number of workers driving long commutes to distant jobsites, primarily to the west and southwest. This finding is supported by the results of the RivTAM traffic model projections used in the TIA. The provision of additional employment options in proximity to existing residential development in the City will help reduce local vehicle miles traveled as the employment generated by the project slowly improves the City's job/housing ratio, and more local jobs are created for City residents. Therefore, the proposed project is consistent with City policies encouraging alternative transportation. Since the project will not create any significant impacts related to non-vehicular transportation, no mitigation is required.

Although there is currently no transit service in the project area, the proposed project would be designed to accommodate bus access on all project streets. Bus turnouts and shelters would be provided at all active bus stops. It is expected that transit service would be provided once the project reaches a transit-supportable level of operations. Candidate streets for future bus routes within the project limits are Eucalyptus Avenue, Street C, Street E, and Street F as shown in WLCSP Figure 3-14.

The WLCSP provides for connections to existing trails to the west along Redlands Boulevard, and to the southwest along Cactus Avenue. In addition, the plan provides for a new trail connection from the southwest corner of the site around the land designated as open space under the WLCSP, to connect to a future planned "trailhead" at the northwest corner of the state-owned property to the south. The

[1] Based on a ratio of 0.5 employees per 1000 square feet of logistics. This ratio is taken from: *DTA Public Works Database; confirmed by "Employment Density Study," SCAG (2001), and "Logistics Trends and Specific Industries," NAIOP Research Foundation (March 2010).San Bernardino Planning Department.*

WLCSP also includes a “loop” trail segment through the WLCSP along Street F to Eucalyptus Avenue and back to Redlands Boulevard (see FEIR Figure 3-12, *Non-Vehicular Circulation*). In addition, the project will be conditioned to provide sidewalks and landscaping treatments to allow for pedestrian access throughout the site. With these planned improvements, the WLCSP will have less than significant impacts regarding non-vehicular circulation and no mitigation is required.

4.15.6 Significant Impacts

The following potential impacts were determined to be significant, either because the project would contribute to an intersection, roadway segment or freeway facility already exceeding the LOS threshold, or because the project would cause the intersection, roadway segment or freeway to exceed the LOS threshold. The project would be required to make required on-site and adjacent off-site improvements, contribute to local and regional circulation improvement through the payment of TUMFs, and would therefore contribute to improvements that may mitigate the direct project impact or cumulative impact of the project. Mitigation of direct project impacts can be in the form of improvements to the intersection, or payment of the fees if projects funded by the fee would mitigate the project impact to a less than significant level.

Planned Improvements. As part of the analysis of project traffic impacts, it is important to note that development within the WLCSP will make a number of roadway and intersection improvements that are within or adjacent to project property (i.e., on-site improvements). These improvements include:

- Gilman Springs/Alessandro Boulevard Intersection;
- Gilman Springs/Eucalyptus Avenue Intersection;
- SR-60 Westbound Ramp/World Logistics Center Parkway Intersection;
- SR-60 Eastbound Ramp/World Logistics Center Parkway Intersection;
- Redlands Boulevard/Eucalyptus Avenue Intersection;
- World Logistics Center Parkway/Eucalyptus Avenue Intersection;
- World Logistics Center Parkway (Street A)/Alessandro Boulevard (Streets C and E) Roundabout;
- World Logistics Center Parkway (Street A)/Streets E and F Roundabout;
- Street F/Street C Roundabout;
- Eucalyptus Avenue from Redlands Boulevard to World Logistics Center Parkway (south side); and
- Cactus Avenue Extension from the existing Redlands Boulevard/Cactus Avenue intersection to internal loop Street "E".
- Internal Streets A, B, C, E, and F shown on WLCSP Circulation Plan (FEIR Figure 3-10).

4.15.6.1 Existing (2018) With Phase 1 Conditions Traffic and Level of Service

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative

traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows:

- Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C.
- Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z.
- Freeway mainline: LOS D.
- Freeway Ramp Merge/Diverge: LOS D.

Impacts

Intersection Analysis. Existing baseline (year 2018) with Phase 1 intersection levels of service for the study area intersections are summarized in Tables 4.1--21 and 4.15-22, which shows there are 19 study intersections where Phase 1 of the project would have a significant impact.

Would Exceed Threshold of Significance Under Both the Existing Conditions and the Existing Plus Phase 1 Scenario

- IN-10 Redlands Blvd./Locust Ave. (AM, PM)
- IN-20 Oliver St./Alessandro Blvd. (PM)
- IN-37 Moreno Beach Dr./SR-60 EB Ramps (PM)
- IN-65 Perris Blvd./Cactus Ave. (AM)
- IN-83 Martin Luther King Blvd/Canyon Crest Dr. (AM)
- IN-85 Martin Luther King Blvd/I-215 NB Ramps (AM, PM)
- IN-86 Central Ave/Chicago Ave (PM)
- IN-94 Arlington Ave./Victoria Ave. (AM)
- IN-95 Alessandro Blvd./Chicago Ave. (PM)
- IN-107 Evans Rd./Rider St. (AM)
- IN-114 Evans Rd./Orange Ave. (AM, PM)
- IN-115 Evans Rd./Nuevo Rd. (AM)
- IN-122 Bridge St./Ramona Expy. (AM, PM)
- IN-123 Gilman Springs Rd./Bridge St. (AM, PM)
- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM)
- IN-125 SR-79 (Sanderson Ave) SB/Gilman Springs Rd. (AM, PM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (AM)
- IN-133 San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- IN-134 Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	5.8	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	10.7	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.2	B	RABT	7.0	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	10.9	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	12.3	B	CSS	16.7	C
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	27.7	**D**	CSS	86.8	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	25.2	C	SIGNAL	29.1	C
IN-12	Theodore St/Ironwood Ave	D	CSS	8.5	A	CSS	8.5	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	16.3	B	SIGNAL	22.7	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	10.0	A	SIGNAL	16.1	B
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.7	A	SIGNAL	14.9	B
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.3	A	SIGNAL	3.6	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	4	A	SIGNAL	16.9	B
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.3	A	SIGNAL	8.4	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	38.0	**E**	CSS	57.6	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	26.9	C	SIGNAL	28.8	C
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	23.7	C	AWS	16.2	C
IN-24	Oliver St/Cactus Ave	D	SIGNAL	20.8	C	SIGNAL	22.0	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	SIGNAL	16.5	B
IN-26	Quincy St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.5	B	AWS	17.0	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	20.5	C	SIGNAL	23.2	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	31.8	C	SIGNAL	32.1	C
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	23.2	C	SIGNAL	25.8	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	18.8	B	SIGNAL	21.7	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	25.9	C	SIGNAL	27.9	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	16.1	B	SIGNAL	19.6	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	19.4	B	SIGNAL	20.9	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.4	A	CSS	8.9	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	40.1	D	SIGNAL	53.1	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	30.7	C	SIGNAL	42.3	D
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	28.6	C	SIGNAL	31.6	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	37.3	D	SIGNAL	40.1	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	21.7	C	SIGNAL	23.3	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	31.2	C	SIGNAL	43.1	D
IN-42	Nason St/Iris Ave	C	SIGNAL	16.1	B	SIGNAL	17.0	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	20.5	C	SIGNAL	22.8	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	11.9	B	SIGNAL	12.3	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	27.6	C	SIGNAL	30.7	C
IN-46	Kitching St/Krameria Ave	D	SIGNAL	19.5	B	SIGNAL	21.3	C
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	21.8	C	SIGNAL	22.9	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	24.9	C	SIGNAL	24.7	C

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	29.9	C	SIGNAL	32.0	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	9.1	A	SIGNAL	9.6	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	22.4	C	SIGNAL	22.9	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	27.3	C	SIGNAL	28.5	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	26.9	C	SIGNAL	27.6	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	26.3	C	SIGNAL	27.1	C
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	25.2	C	SIGNAL	25.6	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	20.8	C	SIGNAL	21.0	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	27.0	C	SIGNAL	28.0	C
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	22.7	C	SIGNAL	22.7	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	35.3	D	SIGNAL	35.3	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	10.6	B	SIGNAL	10.6	B
IN-62	Graham St/Cactus Ave	D	SIGNAL	20.0	C	SIGNAL	21.2	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	40.3	D	SIGNAL	40.7	D
IN-64	Indian St/Cactus Ave	C	SIGNAL	27.6	C	SIGNAL	28.8	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	68.4	**E**	SIGNAL	66.3	**E**
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	29.7	C	SIGNAL	30.2	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.3	A	SIGNAL	4.7	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	18.9	B	SIGNAL	23.7	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	24.7	C	SIGNAL	25.0	C
IN-70	Day St/Alessandro Blvd	D	SIGNAL	14.7	B	SIGNAL	16.0	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	18.4	B	SIGNAL	18.8	B
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	4.6	A	SIGNAL	6.2	A
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	35.6	D	SIGNAL	38.1	D
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	22.4	C	SIGNAL	20.9	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	23.0	C	SIGNAL	26.1	C
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	32.2	C	SIGNAL	26.7	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	12.5	B	SIGNAL	13.3	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	14.3	B	SIGNAL	21.4	C
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	35.0	C	SIGNAL	24.5	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	32.2	C	SIGNAL	44.8	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	44.6	D	SIGNAL	41.3	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	15.1	B	SIGNAL	17.5	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	71.0	**E**	SIGNAL	75.4	**E**
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	18.5	B	SIGNAL	18.7	B
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	40.2	**E**	AWS	40.3	**E**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	53.1	D	SIGNAL	50.4	D
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	14.5	B	SIGNAL	15.7	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	35.4	D	SIGNAL	33.1	C
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	8.1	A	SIGNAL	8.6	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.2	C	SIGNAL	32.6	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	13.5	B	SIGNAL	13.6	B
IN-92	Arlington Ave/Maude St	D	SIGNAL	21.5	C	SIGNAL	20.6	C
IN-93	Horace St/Arlington Ave	D	SIGNAL	11.8	B	SIGNAL	12.6	B

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	60.7	**E**	SIGNAL	62.9	**E**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	38.0	D	SIGNAL	46.4	D
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	27.0	C	SIGNAL	28.3	C
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	28.9	C	SIGNAL	30.5	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	32.8	C	SIGNAL	54.8	D
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	32.1	C	SIGNAL	32.4	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	15.4	B	SIGNAL	14.1	B
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	36.0	D	SIGNAL	37.7	D
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	55.3	E	SIGNAL	57.3	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	7.7	A	SIGNAL	8.9	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.3	C	SIGNAL	28.5	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	27.6	C	SIGNAL	28.1	C
IN-107	Evans Rd/Rider St	C	SIGNAL	41.3	**D**	SIGNAL	41.3	**D**
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	19.2	B	SIGNAL	20.0	C
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	>180	**F**	AWS	>180	**F**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	45.8	**D**	SIGNAL	44.5	**D**
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	43.6	**E**	CSS	53.0	**F**
IN-123	Gilman Springs Rd/Bridge St	C	CSS	75.8	**F**	CSS	101.7	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	150.8	**F**	CSS	>180	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	40.9	**E**	CSS	44.4	**E**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	43.6	D	SIGNAL	40.9	D
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	17.5	B	SIGNAL	18.3	B
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	12.1	B	SIGNAL	12.4	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	18.0	B	SIGNAL	18.0	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	55.0	**F**	AWS	73.1	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	85.4	**F**	AWS	116.2	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	78.0	**F**	AWS	109.1	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	13.4	B	CSS	14.4	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.1	A	AWS	9.4	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means the cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	5.5	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	11.2	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.2	B	RABT	6.5	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	10.0	A
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	29.4	D	CSS	33.7	D
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	73.0	**F**	CSS	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	28.5	C	SIGNAL	37.2	D
IN-12	Theodore St/Ironwood Ave	D	CSS	8.5	A	CSS	8.9	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	21.2	C	SIGNAL	22.6	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	17.8	B	SIGNAL	20.9	C
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.1	A	SIGNAL	12.6	B
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.0	A	SIGNAL	2.4	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	2.6	A	SIGNAL	19.7	B
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.0	A	SIGNAL	8.5	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	19.3	C	CSS	25.1	**D**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	29.3	C	SIGNAL	35.2	D
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	33.7	**D**	AWS	20.4	C
IN-24	Oliver St/Cactus Ave	D	SIGNAL	17.1	B	SIGNAL	18.0	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	15.4	B	SIGNAL	15.9	B
IN-26	Quincy St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	10.6	B	AWS	20.2	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	18.7	B	SIGNAL	19.6	B
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	33.4	C	SIGNAL	41.4	D
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	20.8	C	SIGNAL	18.8	B
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	13.9	B	SIGNAL	22.4	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	36.3	D	SIGNAL	37.2	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	18.5	B	SIGNAL	19.1	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	18.5	B	SIGNAL	19.4	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	8.9	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	41.8	D	SIGNAL	44.8	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	61.8	**E**	SIGNAL	66.6	**E**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	31.1	C	SIGNAL	32.6	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	56.6	**E**	SIGNAL	54.2	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	17.2	B	SIGNAL	18.8	B
IN-41	Lasselle St/Iris Ave	D	SIGNAL	34.4	C	SIGNAL	36.3	D
IN-42	Nason St/Iris Ave	C	SIGNAL	19.4	B	SIGNAL	15.5	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	15.0	B	SIGNAL	15.9	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	10.7	B	SIGNAL	11.5	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	20.7	C	SIGNAL	24.1	C
IN-46	Kitching St/Krameria Ave	D	SIGNAL	14.6	B	SIGNAL	15.5	B
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	19.5	B	SIGNAL	20.1	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	20.0	C	SIGNAL	20.6	C

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	22.5	C	SIGNAL	23.1	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	7.5	A	SIGNAL	7.9	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	19.4	B	SIGNAL	20.4	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	19.9	B	SIGNAL	20.5	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	28.8	C	SIGNAL	29.4	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	18.8	B	SIGNAL	19.7	B
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	26.3	C	SIGNAL	27.1	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	27.9	C	SIGNAL	29.9	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	36.7	D	SIGNAL	38.6	D
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	26.6	C	SIGNAL	27.7	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	34.5	C	SIGNAL	36.3	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	9.3	A	SIGNAL	9.4	A
IN-62	Graham St/Cactus Ave	D	SIGNAL	21.0	C	SIGNAL	22.4	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	31.8	C	SIGNAL	33.0	C
IN-64	Indian St/Cactus Ave	C	SIGNAL	23.1	C	SIGNAL	22.9	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	35.5	D	SIGNAL	35.9	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	29.0	C	SIGNAL	30.1	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	9.0	A	SIGNAL	8.8	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	13.0	B	SIGNAL	14.0	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	17.4	B	SIGNAL	18.2	B
IN-70	Day St/Alessandro Blvd	D	SIGNAL	14.5	B	SIGNAL	15.5	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	20.8	C	SIGNAL	21.1	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	14.4	B	SIGNAL	14.6	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	7.0	A	SIGNAL	7.7	A
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	26.5	C	SIGNAL	27.8	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	8.8	A	SIGNAL	10.6	B
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	53.6	D	SIGNAL	48.4	D
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	15.8	B	SIGNAL	24.1	C
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	9.4	A	SIGNAL	8.3	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	15.8	B	SIGNAL	16.0	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	27.8	C	SIGNAL	27.8	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	51.6	D	SIGNAL	48.8	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	10.9	B	SIGNAL	11.1	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	34.2	C	SIGNAL	32.6	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	7.4	A	SIGNAL	8.2	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	>180	**F**	AWS	>180	**F**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	91.4	**F**	SIGNAL	94.8	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	15.8	B	SIGNAL	16.7	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	39.6	D	SIGNAL	51.5	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	5.9	A	SIGNAL	6.0	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	24.2	C	SIGNAL	23.9	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	6.4	A	SIGNAL	6.9	A
IN-92	Arlington Ave/Maude St	D	SIGNAL	27.1	C	SIGNAL	27.5	C
IN-93	Horace St/Arlington Ave	D	SIGNAL	5.9	A	SIGNAL	6.5	A

Table 4.15-21: Intersection LOS under Existing Plus Phase 1 Scenario (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	39.0	D	SIGNAL	40.9	D
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	78.5	**E**	SIGNAL	66.2	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	11.1	B	SIGNAL	11.9	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	22.8	C	SIGNAL	28.3	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	34.4	C	SIGNAL	35.7	D
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	29.9	C	SIGNAL	30.0	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	20.1	C	SIGNAL	20.9	C
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	27.9	C	SIGNAL	28.5	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	36.1	D	SIGNAL	36.4	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	16.7	B	SIGNAL	18.0	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	21.3	C	SIGNAL	24.9	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	22.8	C	SIGNAL	23.2	C
IN-107	Evans Rd/Rider St	C	SIGNAL	28.4	C	SIGNAL	28.9	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	11.9	B	SIGNAL	13.2	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	39.0	**E**	AWS	41.5	**E**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	23.8	C	SIGNAL	23.3	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	111.0	**F**	CSS	140.5	**F**
IN-123	Gilman Springs Rd/Bridge St	C	CSS	84.5	**F**	CSS	94.1	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	146.0	**F**	CSS	141.9	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	115.4	**F**	CSS	138.6	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	29.7	C	SIGNAL	29.0	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	31.4	C	SIGNAL	34.8	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	14.0	B	SIGNAL	15.1	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	17.5	B	SIGNAL	18.3	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	23.1	C	AWS	30.5	D
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	104.8	**F**	AWS	127.8	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	178.9	**F**	AWS	>180	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	12.5	B	CSS	13.4	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.6	A	AWS	10.0	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Roadway Analysis. Existing baseline (year 2018) with Phase 1 roadway segment levels of service for the study area are summarized in Table 4.15-22, which shows three roadway segments would operate at unsatisfactory levels of service.

Phase 1 of the project would worsen the existing LOS deficiency at the following three roadway segments under existing with Phase 1 conditions:

- Gilman Springs Rd. between SR-60 and Alessandro Blvd. would exceed the threshold of significance under both Existing Conditions and under the Existing Plus Phase 1 Scenario. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under the Existing Plus Phase 1 Scenario.
- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. would exceed the threshold of significance under both Existing Conditions and under the Existing Plus Phase 1 Scenario. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under the Existing Plus Phase 1 Scenario.
- Redlands Boulevard from Eucalyptus Avenue to the SR-60 eastbound ramps. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under the Existing Plus Phase 1 Scenario.

Table 4.15-22: Existing Plus Phase 1 Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	Existing Conditions			Existing Plus Phase 1 Conditions			Project Impact Significant?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section**	Daily Volume	LOS			
S-1	Theodore St	SR-60 WB Ramps	Ironwood Ave	D	2U	1,174	A	2U	2,438	A			
S-2	World Logistics Center Pkwy (A)	SR-60 EB Ramps	Eucalyptus Ave	D	2U	2,246	A	6D	11,196	A			
S-3	Eucalyptus Ave	Redlands Blvd	World Logistics Center Pkwy (A)	D	2U***	797	A	4D	1,822	A			
S-4	Eucalyptus Ave (Street B)	World Logistics Center Pkwy (A)	Gilman Springs Rd	N/A	Future Road			Future Road					
S-5	World Logistics Center Pkwy (A)	Eucalyptus Ave	Street E/Street F	D	2U	1,120	A	4D	21,762	A			
S-6	Street E	World Logistics Center Pkwy (A)	Cactus Ave Extension	N/A	Future Road			2U	3,415	A			
S-7	Street F	World Logistics Center Pkwy (A)	Alessandro Blvd (Street C)	N/A	Future Road			2U	869	A			
S-8	World Logistics Center Pkwy (A)	Street E/Street F	Alessandro Blvd (Street C)	D	2U	1,120	A	4D	10,705	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	World Logistics Center Pkwy (A)	D	2U	3,479	A	4U	6,181	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave	N/A	Future Road			4U	10,044	A			
S-11	Alessandro Blvd (Street C)	World Logistics Center Pkwy (A)	Street F	D	2U	2,801	A	4U	2,895	A			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,801	A	4U	4,563	A			
S-14	Alessandro Blvd	Moreno Beach Dr	Redlands Blvd	D	2U	5,305	A	2U	5,456	A			
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	D	2U	22,065	**F**	2U	21,882	**F**	Yes	Widen to 4 lanes	D
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	19,394	**F**	2U	17,491	**F**	Yes	Widen to 4 lanes	C
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	D	2U	11,346	**E**	2U	12,135	**E**	Yes	Widen to 4 lanes	A
S-19	Redlands Blvd	Eucalyptus Ave	Alessandro Blvd	C	2U	8,914	C	2U	8,083	B			
S-20	Alessandro Blvd	Redlands Blvd	Merwin St	C	2U	5,325	A	2U	300	A			
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave	C	2U	8,149	B	2U	6,847	A			
S-22	Cactus Ave	Redlands Blvd	Cactus Ave Extension	C	2U***	527	A	4U	8,353	A			

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

Freeway Segment Analysis. Existing (2018) with Phase 1 freeway segment levels of service for the study area are summarized in Tables 4.15-23 and 4.15-24, which show twenty-four freeway segments already operate at unsatisfactory levels of service.

Northbound or Eastbound

- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-60 from Pierce St. to Magnolia Ave.
- SR-91 from Adams St. to Madison St.
- SR-91 from Central Ave. to 14th St.
- I-215 from Barton Rd. to Mt. Vernon Ave.
- I-215 from Auto Plaza Dr. to Mill St.

Southbound or Westbound

- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-91 from McKinley St. to Pierce St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Tyler St. to Van Buren Blvd.
- SR-91 from Van Buren Blvd. to Adams St.
- SR-91 from Madison St. to Arlington Ave.
- I-215 from Center St. to La Cadena Dr.
- I-215 from La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

Table 4.15-23: Existing Plus Phase 1 Freeway Mainline LOS

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	26.7	D	6,467	27.6	D	6170	27.6	D	6,400	27.3	D
F-3	SR-60	Ramona Ave to Central Ave	8,109	38.6	**E**	9,400	47.3	**F**	8,280	40.6	**E**	9,310	46.7	**F**
F-4	SR-60	Central Ave to Mountain Ave	7,190	31.3	D	8,271	36.3	**E**	7,370	32.9	D	8,180	35.9	**E**
F-5	SR-60	Mountain Ave to Euclid Ave	7,513	33.6	D	8,231	36.0	**E**	7,690	35.3	**E**	8,130	35.5	**E**
F-6	SR-60	Euclid Ave to Grove Ave	7,423	33.0	D	8,339	36.9	**E**	7,600	34.6	D	8,240	36.4	**E**
F-7	SR-60	Grove Ave to Vineyard Ave	6,809	28.9	D	9,236	45.4	**F**	6,980	30.2	D	9,140	44.8	**E**
F-8	SR-60	Vineyard Ave to Archibald Ave	6,662	27.8	D	9,400	47.3	**F**	6,830	29.0	D	9,290	46.5	**F**
F-9	SR-60	Archibald Ave to Haven Ave	6,718	28.1	D	6,764	26.6	D	6,890	29.4	D	6,660	26.2	D
F-10	SR-60	Haven Ave to Milliken Ave	7,667	25.4	C	7,366	22.5	C	7,840	26.3	D	7,250	22.2	C
F-11	SR-60	Milliken Ave to I-15	4,225	16.8	B	5,182	19.4	C	4,380	17.5	B	5,090	19.2	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	3,541	14.0	B	4,369	16.3	B	3,740	14.9	B	4,220	15.9	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission Blvd/Country Village	2,913	11.5	B	3,567	13.3	B	3,160	12.6	B	3,440	13.0	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	2,437	9.8	A	2,959	11.3	B	2,680	10.9	A	2,870	11.2	B
F-15	SR-60	Pedley Rd to Pyrite St	2,650	10.7	A	3,232	12.3	B	2,910	11.8	B	3,070	11.9	B
F-16	SR-60	Pyrite St to Valley Way	3,348	13.3	B	3,642	13.8	B	3,620	14.5	B	3,520	13.5	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,515	24.5	C	5,262	28.0	D	4,740	26.2	D	5,160	27.6	D
F-18	SR-60	Rubidoux Blvd to Market St	4,697	25.7	C	5,477	29.8	D	4,790	26.6	D	5,370	29.4	D
F-19	SR-60	Market St to Main St	4,971	27.8	D	6,433	39.2	**E**	5,200	29.9	D	6,260	37.6	**E**
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,400	59.2	**F**	9,400	51.1	**F**	9,740	69.7	**F**	9,320	51.9	**F**
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	5,188	20.4	C	6,193	23.6	C	5,540	22.2	C	6,060	23.3	C
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,828	23.2	C	4,700	47.8	**F**	2,960	25.3	C	4,690	49.9	**F**
F-30	SR-60	Heacock St to Perris Blvd	2,529	20.2	C	3,336	25.9	C	2,770	23.2	C	3,290	26.3	D
F-31	SR-60	Perris Blvd to Nason St	2,269	17.9	B	2,843	21.3	C	2,480	20.4	C	2,830	22.0	C
F-32	SR-60	Nason St to Moreno Beach Dr	1,977	10.5	A	2,468	12.3	B	2,110	11.6	B	2,500	12.8	B
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,757	9.4	A	2,053	10.2	A	1,860	10.4	A	2,140	11.1	B
F-34	SR-60	Redlands Blvd to Theodore St	1,671	13.4	B	1,708	12.8	B	1,850	15.5	B	1,850	14.5	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,600	12.9	B	1,738	13.0	B	See Weaving Analysis			See Weaving Analysis		
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,271	13.5	B	1,319	12.3	B	1,270	13.8	B	1,280	12.5	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,272	10.2	A	1,317	10.0	A	1,270	10.3	A	1,280	9.8	A
F-39	SR-91	I-15 to McKinley St	4,206	15.7	B	6,373	26.2	D	4,270	16.1	B	6,340	26.2	D
F-40	SR-91	McKinley St to Pierce St	4,797	24.9	C	5,269	30.0	D	4,890	25.7	C	5,250	30.1	D
F-41	SR-91	Pierce St to Magnolia Ave	6,354	39.4	**E**	7,050	54.7	**F**	6,450	41.1	**E**	7,030	54.3	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	7,050	28.6	D	7,050	30.4	D	7,130	29.2	D	7,020	30.4	D
F-44	SR-91	Tyler St to Van Buren Blvd	7,101	28.7	D	7,990	37.2	**E**	7,170	29.3	D	7,970	37.0	**E**
F-45	SR-91	Van Buren Blvd to Adam St	4,763	17.8	B	4,956	19.4	C	4,800	18.1	C	4,940	19.5	C
F-46	SR-91	Adam St to Madison St	7,451	57.6	**F**	8,209	96.0	**F**	7,500	59.6	**F**	8,190	94.9	**F**

Table 4.15-23: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,677	33.1	D	5,386	21.5	C	7,710	33.6	D	5,370	21.6	C
F-49	SR-91	Central Ave to 14th St	7,050	52.1	**F**	5,797	35.9	**E**	7,000	51.8	**F**	5,800	36.3	**E**
F-50	SR-91	14th St to University Ave	4,644	17.4	B	4,194	16.3	B	4,570	17.2	B	4,240	16.5	B
F-51	SR-91	University Ave to Spruce St	5,924	17.9	B	5,450	17.2	B	5,880	17.9	B	5,500	17.4	B
F-66	I-215	Scott Rd to Newport Rd	2,739	14.4	B	3,285	16.4	B	2,730	14.4	B	3,270	16.3	B
F-68	I-215	Newport Rd to McCall Blvd	1,900	10.0	A	2,047	10.2	A	1,840	9.7	A	2,040	10.2	A
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	12.9	B	3,293	16.4	B	2,350	12.4	B	3,280	16.4	B
F-70	I-215	Ethanac Rd to SR-74	3,787	20.1	C	3,150	15.7	B	3,670	19.4	C	3,140	15.7	B
F-71	I-215	SR-74 to Redlands Ave	3,350	17.9	B	4,181	21.4	C	3,200	17.1	B	4,180	21.3	C
F-86	I-215	Redlands Blvd to D St	4,431	24.1	C	3,185	16.0	B	4,290	23.1	C	3,190	16.0	B
F-87	I-215	D St to Nuevo St/Harvil Ave	3,500	13.8	B	4,813	18.0	C	3,360	13.3	B	4,780	18.0	B
F-88	I-215	Nuevo St to Ramona Expy	4,515	24.8	C	5,262	28.4	D	4,520	24.8	C	5,230	28.1	D
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox Blvd	4,913	27.7	D	5,947	34.3	D	4,920	27.8	D	5,940	34.3	D
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	5,097	29.0	D	4,415	22.9	C	5,070	28.8	D	4,430	23.0	C
F-92	I-215	Van Buren Blvd to Cactus Ave	4,817	19.2	C	4,206	15.7	B	4,770	19.0	C	4,210	15.8	B
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,515	24.8	C	5,262	28.4	D	4,450	24.4	C	5,350	29.1	D
F-95	I-215	Eucalyptus Ave to SR-60	4,877	27.5	D	5,885	33.7	D	4,820	27.0	D	6,010	35.0	D
F-74	I-215	Columbia Ave to Center St	6,697	28.8	D	7,050	28.6	D	6,660	28.8	D	7,100	28.9	D
F-75	I-215	Center St to La Cadena Dr	5,146	29.7	D	5,293	28.4	D	5,120	29.4	D	5,310	28.6	D
F-76	I-215	La Cadena Dr to Barton Rd	5,191	29.8	D	4,937	25.8	C	5,160	29.6	D	4,980	26.1	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,708	35.3	**E**	5,640	32.0	D	5,690	35.5	**E**	5,700	32.5	D
F-78	I-215	Mt. Vernon Ave to I-10	6,088	25.8	C	5,802	22.5	C	6,070	25.7	C	5,880	22.8	C
F-80	I-215	Auto Plaza Dr to Mill St	5,201	20.7	C	9,400	47.9	**F**	5,190	20.7	C	9,440	48.3	**F**
F-83	I-215	Baseline Rd to Highland Ave	3,158	12.5	B	4,700	17.6	B	3,140	12.5	B	4,730	17.7	B
F-52	I-10	SR-60 to Beaumont Ave	3,462	13.6	B	4,847	18.8	C	3,490	13.7	B	4,740	18.3	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,519	14.0	B	4,927	19.4	C	3,530	14.1	B	4,890	19.2	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,689	14.6	B	5,165	20.4	C	3,700	14.7	B	5,120	20.2	C
F-55	I-10	Highland Springs Ave to Sunset Ave	3,547	14.1	B	4,966	19.6	C	3,540	14.1	B	4,960	19.5	C
F-56	I-10	Sunset Ave to 22nd St	3,462	11.0	B	4,847	15.2	B	3,450	11.0	A	4,850	15.2	B
F-57	I-10	22nd St to 8th St	3,406	13.6	B	4,768	18.7	C	3,390	13.5	B	4,770	18.7	C
F-58	I-10	8th St to Hargrave St	3,406	13.6	B	4,768	18.7	C	3,380	13.5	B	4,770	18.7	C
F-59	I-10	Hargrave St to Fields Rd	3,065	12.3	B	4,291	16.9	B	3,040	12.2	B	4,300	16.9	B
F-60	I-10	Fields Rd to Morongo Trail	2,923	11.7	B	4,092	16.1	B	2,890	11.6	B	4,110	16.2	B
F-61	I-10	Morongo Trail to Main St	2,583	10.2	A	3,616	14.0	B	2,560	10.1	A	3,630	14.1	B
F-62	I-10	Main St to Haugen-Lehmann Way	2,583	10.1	A	3,616	14.0	B	2,560	10.0	A	3,640	14.1	B
F-64	I-10	SR-111 to Tipton Rd	2,242	8.8	A	3,139	12.1	B	2,230	8.8	A	3,160	12.2	B
F-65	I-10	Tipton Rd to SR-62	2,242	8.8	A	3,139	12.1	B	2,230	8.8	A	3,160	12.2	B

Indicates that the LOS exceeds the target level

Table 4.15-23: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,638	26.3	D	6,223	24.8	C	6,560	26.0	D	6,330	25.5	C
F-3	SR-60	Ramona Ave to Central Ave	6,167	24.4	C	6,459	26.1	D	6,090	24.3	C	6,560	26.8	D
F-4	SR-60	Central Ave to Mountain Ave	6,751	28.4	D	6,489	26.9	D	6,650	28.0	D	6,600	27.7	D
F-5	SR-60	Mountain Ave to Euclid Ave	6,859	28.8	D	6,883	29.0	D	6,770	28.5	D	6,990	29.9	D
F-6	SR-60	Euclid Ave to Grove Ave	7,108	29.3	D	7,527	32.6	D	7,020	29.0	D	7,630	33.6	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,656	26.2	D	9,400	51.0	**F**	6,570	25.9	C	9,510	53.3	**F**
F-8	SR-60	Vineyard Ave to Archibald Ave	7,821	34.9	D	9,400	53.0	**F**	7,710	34.4	D	9,510	54.7	**F**
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	7,339	22.4	C	5,698	17.5	B	7,220	22.1	C	5,820	18.0	B
F-11	SR-60	Milliken Ave to I-15	5,456	20.8	C	5,111	19.6	C	5,330	20.4	C	5,240	20.3	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,888	14.7	B	4,648	14.3	B	4,680	14.2	B	4,780	14.8	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission Blvd/Country Village	5,070	19.2	C	5,970	23.7	C	5,000	19.1	C	6,120	24.6	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,277	16.3	B	4,958	19.3	C	4,150	15.9	B	5,090	20.0	C
F-15	SR-60	Pedley Rd to Pyrite St	4,296	16.3	B	4,981	19.4	C	4,160	16.0	B	5,120	20.1	C
F-16	SR-60	Pyrite St to Valley Way	4,326	16.4	B	5,020	19.6	C	4,170	16.0	B	5,100	20.0	C
F-17	SR-60	Valley Way to Rubidoux Blvd	4,515	23.2	C	5,262	29.2	D	4,520	23.5	C	5,400	30.8	D
F-18	SR-60	Rubidoux Blvd to Market St	4,697	24.1	C	5,477	30.6	D	4,520	23.2	C	5,610	32.3	D
F-19	SR-60	Market St to Main St	6,485	40.3	**E**	5,115	27.9	D	6,310	38.6	**E**	5,220	29.1	D
F-20	SR-60	Main to SR-91	7,050	47.9	**F**	4,062	21.0	C	6,830	45.5	**F**	4,330	22.9	C
F-24	SR-60	Martin Luther King Blvd to Central Ave	7,050	33.3	D	6,885	30.5	D	6,940	34.0	D	6,970	32.4	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,385	30.6	D	8,085	36.9	**E**	7,270	30.3	D	8,230	38.8	**E**
F-27	SR-60	I-215 to Day St	4,328	41.6	**E**	3,251	26.8	D	4,320	43.2	**E**	3,230	27.5	D
F-29	SR-60	Pigeon Pass Rd to Heacock St	4,700	49.0	**F**	2,786	21.9	C	4,740	52.6	**F**	2,800	22.7	C
F-30	SR-60	Heacock St to Perris Blvd	3,192	25.1	C	3,003	24.0	C	3,240	26.6	D	3,070	25.5	C
F-31	SR-60	Perris Blvd to Nason St	2,592	19.5	C	2,695	21.0	C	2,700	21.3	C	2,810	23.0	C
F-32	SR-60	Nason St to Moreno Beach Dr	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,817	14.0	B	1,882	14.7	B	2,000	16.2	B	1,960	16.1	B
F-34	SR-60	Redlands Blvd to Theodore St	1,481	11.6	B	1,504	11.8	B	1,770	14.6	B	1,670	13.8	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,460	11.4	B	1,486	11.7	B	See Weaving Analysis			See Weaving Analysis		
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,121	13.4	B	1,165	12.7	B	1,140	13.9	B	1,120	12.8	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,121	9.0	A	1,165	9.3	A	1,140	9.2	A	1,120	9.0	A
F-39	SR-91	I-15 to McKinley St	6,576	26.3	D	7,158	31.4	D	6,480	26.0	C	7,220	32.0	D
F-40	SR-91	McKinley St to Pierce St	7,050	49.6	**F**	7,050	55.5	**F**	6,960	48.6	**F**	7,100	56.6	**F**
F-41	SR-91	Pierce St to Magnolia Ave	7,050	48.4	**F**	7,050	53.3	**F**	6,960	47.5	**F**	7,100	55.1	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	7,050	48.4	**F**	7,050	53.3	**F**	6,990	48.0	**F**	7,090	54.8	**F**
F-43	SR-91	La Sierra Ave to Tyler St	5,943	34.3	D	7,050	53.3	**F**	5,870	33.9	D	7,100	55.1	**F**
F-44	SR-91	Tyler St to Van Buren Blvd	6,106	23.6	C	7,990	37.2	**E**	6,040	23.5	C	8,020	37.8	**E**
F-45	SR-91	Van Buren Blvd to Adam St	6,381	25.0	C	7,990	37.2	**E**	6,310	24.8	C	8,010	37.7	**E**
F-46	SR-91	Adam St to Madison St	5,931	22.8	C	7,582	33.9	D	5,870	22.7	C	7,590	34.2	D

Table 4.15-23: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,050	48.4	**F**	7,050	52.6	**F**	7,000	48.2	**F**	7,030	52.9	**F**
F-49	SR-91	Central Ave to 14th St	5,166	19.5	C	7,050	30.0	D	5,150	19.6	C	7,020	30.0	D
F-50	SR-91	14th St to University Ave	5,805	22.2	C	7,050	30.0	D	5,830	22.5	C	6,990	29.8	D
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,294	11.5	B	2,318	11.5	B	2,290	11.4	B	2,270	11.2	B
F-68	I-215	Newport Rd to McCall Blvd	2,528	12.6	B	3,111	15.4	B	2,530	12.6	B	3,020	14.9	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,528	12.6	B	3,111	15.4	B	2,530	12.6	B	3,020	14.9	B
F-70	I-215	Ethanac Rd to SR-74	2,882	14.4	B	3,854	19.1	C	2,900	14.5	B	3,760	18.6	C
F-71	I-215	SR-74 to Redlands Ave	4,515	23.2	C	4,700	24.1	C	4,540	23.4	C	4,610	23.5	C
F-86	I-215	Redlands Blvd to D St	2,538	12.7	B	2,634	13.1	B	2,570	13.0	B	2,550	12.7	B
F-87	I-215	D St to Nuevo St/Harvil Ave	3,380	12.7	B	3,249	12.1	B	3,410	12.8	B	3,160	11.8	B
F-88	I-215	Nuevo St to Ramona Expy	4,515	23.2	C	5,262	28.0	D	4,550	23.4	C	5,240	27.8	D
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox Blvd	2,658	13.3	B	5,310	28.1	D	2,680	13.4	B	5,260	27.8	D
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	3,802	19.7	C	7,050	46.7	**F**	3,850	20.0	C	7,000	45.9	**F**
F-92	I-215	Van Buren Blvd to Cactus Ave	3,572	13.4	B	6,195	23.6	C	3,600	13.5	B	6,170	23.5	C
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	5,031	26.7	D	6,129	35.5	**E**	5,110	27.2	D	6,070	34.9	D
F-95	I-215	Eucalyptus Ave to SR-60	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-74	I-215	Columbia Ave to Center St	7,050	29.6	D	7,050	28.4	D	7,070	29.7	D	6,990	28.0	D
F-75	I-215	Center St to La Cadena Dr	7,050	50.2	**F**	7,050	47.3	**F**	7,070	50.6	**F**	7,010	47.2	**F**
F-76	I-215	La Cadena Dr to Barton Rd	7,050	49.6	**F**	7,050	46.7	**F**	7,100	50.5	**F**	7,030	46.4	**F**
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,974	34.6	D	7,050	46.7	**F**	6,010	35.3	**E**	7,040	46.6	**F**
F-78	I-215	Mt. Vernon Ave to I-10	5,726	22.1	C	5,432	20.5	C	5,780	22.4	C	5,420	20.4	C
F-80	I-215	Auto Plaza Dr to Mill St	6,123	23.7	C	5,837	22.0	C	6,110	23.6	C	5,830	22.0	C
F-83	I-215	Baseline Rd to Highland Ave	4,700	17.6	B	3,704	13.7	B	4,670	17.5	B	3,700	13.7	B
F-52	I-10	SR-60 to Beaumont Ave	4,888	20.9	C	4,190	15.8	B	4,910	21.0	C	4,160	15.7	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,968	21.5	C	4,259	16.3	B	4,970	21.5	C	4,200	16.0	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	5,209	22.7	C	4,465	17.0	B	5,190	22.6	C	4,440	17.0	B
F-55	I-10	Highland Springs Ave to Sunset Ave	5,009	21.7	C	4,293	16.4	B	5,010	21.7	C	4,270	16.3	B
F-56	I-10	Sunset Ave to 22nd St	4,888	16.7	B	4,190	12.8	B	4,900	16.7	B	4,160	12.7	B
F-57	I-10	22nd St to 8th St	4,808	20.7	C	4,121	15.7	B	4,820	20.8	C	4,090	15.6	B
F-58	I-10	8th St to Hargrave St	4,808	20.7	C	4,121	15.7	B	4,820	20.8	C	4,080	15.6	B
F-59	I-10	Hargrave St to Fields Rd	4,327	18.6	C	3,709	14.2	B	4,350	18.7	C	3,660	14.0	B
F-60	I-10	Fields Rd to Morongo Trail	4,127	17.7	B	3,537	13.6	B	4,150	17.8	B	3,490	13.5	B
F-61	I-10	Morongo Trail to Main St	3,646	15.4	B	3,125	11.8	B	3,670	15.5	B	3,080	11.6	B
F-62	I-10	Main St to Haugen-Lehmann Way	3,646	15.4	B	3,125	11.7	B	3,680	15.5	B	3,080	11.5	B
F-64	I-10	SR-111 to Tipton Rd	3,165	13.4	B	2,713	10.2	A	3,190	13.5	B	2,680	10.0	A
F-65	I-10	Tipton Rd to SR-62	3,165	13.4	B	2,713	10.3	A	3,190	13.5	B	2,680	10.1	A

Indicates that the LOS exceeds the target level

Table 4.15-24: Existing Plus Phase 1 Freeway Mainline Impacts and Mitigations

			Northbound / Eastbound											
			Determination of Impact					Existing Plus Phase 1 & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-3	SR-60	Ramona Ave to Central Ave	**E**	**E**	**F**	**F**	Yes	8,280	28.0	D	9,310	30.7	D	Add 1 mixed flow lane
F-5	SR-60	Mountain Ave to Euclid Ave	D	**E**	**E**	**E**	Yes	7,690	25.3	C	8,130	25.4	C	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	**F**	**F**	**F**	**F**	Yes	9,740	39.0	**E**	9,320	32.9	D	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd to Heacock St	C	C	**F**	**F**	Yes	2,960	16.2	B	4,690	24.8	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	**E**	**E**	**F**	**F**	Yes	6,450	25.8	C	7,030	30.5	D	Add 1 mixed flow lane
F-46	SR-91	Adam St to Madison St	**F**	**F**	**F**	**F**	Yes	7,500	32.1	D	8,190	39.7	**E**	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	**F**	**F**	**E**	**E**	Yes	7,000	29.7	D	5,800	23.8	C	Add 1 mixed flow lane
F-77	I-215	Barton Rd to Mt. Vernon Ave	**E**	**E**	D	D	Yes	5,690	23.4	C	5,700	22.0	C	Add 1 mixed flow lane
F-80	I-215	Auto Plaza Dr to Mill St	C	C	**F**	**F**	Yes	5,190	16.4	B	9,440	31.4	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

			Southbound / Westbound											
			Determination of Impact					Existing Plus Phase 1 & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-7	SR-60	Grove Ave to Vineyard Ave	D	C	**F**	**F**	Yes	6,570	19.9	C	9,510	33.4	D	Add 1 mixed flow lane
F-8	SR-60	Vineyard Ave to Archibald Ave	D	D	**F**	**F**	Yes	7,710	24.8	C	9,510	34.0	D	Add 1 mixed flow lane
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	D	D	**E**	**E**	Yes	7,270	22.5	C	8,230	27.1	D	Add 1 mixed flow lane
F-27	SR-60	I-215 to Day St	**E**	**E**	D	D	Yes	4,320	22.9	C	3,230	17.2	B	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd to Heacock St	**F**	**F**	C	C	Yes	4,740	25.4	C	2,800	14.8	B	Add 1 mixed flow lane
F-40	SR-91	McKinley St to Pierce St	**F**	**F**	**F**	**F**	Yes	6,960	28.6	D	7,100	31.2	D	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	**F**	**F**	**F**	**F**	Yes	6,960	28.2	D	7,100	30.7	D	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sierra Ave	**F**	**F**	**F**	**F**	Yes	6,990	28.4	D	7,090	30.7	D	Add 1 mixed flow lane
F-43	SR-91	La Sierra Ave to Tyler St	D	D	**F**	**F**	Yes	5,870	22.7	C	7,100	30.7	D	Add 1 mixed flow lane
F-44	SR-91	Tyler St to Van Buren Blvd	C	C	**E**	**E**	Yes	6,040	18.3	C	8,020	26.6	D	Add 1 mixed flow lane
F-45	SR-91	Van Buren Blvd to Adam St	C	C	**E**	**E**	Yes	6,310	19.1	C	8,010	26.5	D	Add 1 mixed flow lane
F-47	SR-91	Madison St to Arlington Ave	**F**	**F**	**F**	**F**	Yes	7,000	28.5	D	7,030	30.1	D	Add 1 mixed flow lane
F-75	I-215	Center St to La Cadena Dr	**F**	**F**	**F**	**F**	Yes	7,070	29.3	D	7,010	28.1	D	Add 1 mixed flow lane
F-76	I-215	La Cadena Dr to Barton Rd	**F**	**F**	**F**	**F**	Yes	7,100	29.3	D	7,030	27.9	D	Add 1 mixed flow lane
F-77	I-215	Barton Rd to Mt. Vernon Ave	D	**E**	**F**	**F**	Yes	6,010	23.3	C	7,040	27.9	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Freeway Weaving Analysis. Existing (2018) with Phase 1 freeway weaving segment levels of service for the study area are summarized in Table 4.15-25, which identifies five weaving sections where the Project would have a significant impact.

Phase 1 of the project would worsen the existing LOS deficiency at the following five freeway weaving segments under existing with Phase 1 conditions:

Northbound or Eastbound

- I-215 from SR-60 to Columbia Ave.
- I-215 from I-10 to Auto Plaza Dr./Orange Show Rd.

Southbound or Westbound

- SR-60 from University Ave. to Martin Luther King Blvd.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from Arlington Ave. to Central Ave.

Table 4.15-25: Existing Plus Phase 1 Freeway Weaving Section LOS

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,335	21	C	6,819	25	C	5,480	22	C	6,760	25	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	6,646	33.2	D	7,050	34.3	D	6,890	34.8	D	6,940	33.9	D
W-21	SR-60	SR-91 to Blaine St/3rd St	6,137	25.2	C	9,400	42.1	**E**	6,350	26.5	C	9,150	41.2	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	6,061	23.1	C	7,050	28.9	D	6,240	24.4	C	6,880	28.4	D
W-23	SR-60	University Ave to Martin Luther King	5,965	22.6	C	7,050	24.6	C	6,190	23.7	C	6,980	24.7	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	5,979	25.0	C	8,119	31.6	D	6,260	27.2	C	8,010	31.9	D
W-27	SR-60	I-215 to Day St	3,040	11.9	B	9,400	41.9	**E**	3,280	13.1	B	9,230	41.5	**E**
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick	3,197	14.4	B	7,050	32.7	D	3,330	15.2	B	7,010	32.7	D
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-35	SR-61	Theodore St to Gilman Springs Rd	See Basic Analysis			See Basic Analysis			1,600	9.6	A	1,600	9.0	A
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,925	32.1	D	7,050	34.8	D	7,170	32.8	D	7,970	34.8	D
W-48	SR-91	Arlington Ave to Central Ave	7,050	26.5	C	4,922	19.0	B	4,570	26.9	C	4,240	19.1	B
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-93	I-215	Cactus Ave to Alessandro Blvd	4,515	23.1	C	5,262	24.1	C	5,120	23.2	C	5,310	24.4	C
W-95	I-215	Eucalyptus Ave to SR-60	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	4,275	> Capacity	**F**	4,317	22.0	C	6,070	>Capacity	**F**	5,880	22.4	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,300	23.3	C	9,400	35.0	D	4,670	23.2	C	3,700	35.2	**E**
W-81	I-215	Mill St to 2nd St	5,888	22.2	C	7,050	26.6	C	7,040	22.1	C	6,390	26.7	C
W-82	I-215	5th St to Baseline Rd	4,255	12.6	B	7,050	21.8	C	6,110	12.5	B	5,830	21.9	C
W-63	I-10	Haugen-Lehmann Way to SR-111	2,583	8.7	A	3,616	12.1	B	2,230	8.6	A	3,160	12.2	B

Indicates that the LOS exceeds the target level

Table 4.15-25: Existing Plus Phase 1 Freeway Weaving Section LOS (continued)

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,466	19.6	B	5,871	21.3	C	6,247	19.5	B	7,109	22.0	C
W-9	SR-60	Haven Ave to Archibald Ave	6,671	26.3	C	7,844	33.1	D	6,570	26.0	C	9,510	33.8	D
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	5,660	21.3	C	5,717	21.6	C	6,310	21.3	C	5,220	22.3	C
W-22	SR-60	Blaine St/3rd St to University Ave	6,568	22.6	C	6,273	22.6	C	6,830	22.6	C	4,330	23.2	C
W-23	SR-60	University Ave to Martin Luther King	7,050	38.2	**E**	7,050	44.9	**F**	5,580	37.9	**E**	5,820	45.7	**F**
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,050	34.2	D	7,050	34.5	D	6,940	34.5	D	7,100	36.1	**E**
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick	4,700	30.6	D	3,279	20.4	C	7,270	31.1	D	8,230	21.4	C
W-32	SR-60	Moreno Beach Dr to Nason St	2,207	12.1	B	2,252	12.5	B	3,240	13.3	B	3,070	13.0	B
W-35	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			2,000	7.2	A	1,960	8.1	A
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,050	33.4	D	7,050	36.0	**E**	5,870	33.2	D	7,590	36.4	**E**
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	8,102	29.2	D	11,750	> Capacity	**F**	5,150	29.5	D	7,020	>Capacity	**F**
W-93	I-215	Cactus Ave to Alessandro Blvd	5,036	23.0	C	6,139	28.5	D	3,410	23.4	C	3,160	28.2	D
W-95	I-215	Eucalyptus Ave to SR-60	6,019	21.4	C	7,017	25.6	C	2,680	21.8	C	5,260	25.2	C
W-73	I-215	SR-60 to Columbia Ave	7,050	35.1	**E**	7,050	34.9	D	3,850	35.0	**E**	7,000	34.6	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,311	21.8	C	6,261	21.9	C	7,070	21.7	C	6,990	21.7	C
W-81	I-215	Mill St to 2nd St	7,050	24.5	C	6,421	22.7	C	7,100	24.5	C	7,030	22.6	C
W-82	I-215	5th St to Baseline Rd	7,050	22.5	C	5,762	18.0	B	6,010	22.5	C	7,040	18.0	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,646	13.9	B	3,125	11.7	B	3,670	14.1	B	3,080	11.5	B

Indicates that the LOS exceeds the target level

Table 4.15-26: Existing Plus Phase 1 Freeway Weaving Impacts and Mitigations

			Northbound / Eastbound													
			Determination of Impact					Existing Plus Phase 1 & Mitigations								
									AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Sgement type	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS										
W-73	I-215	SR-60 to Columbia Ave	**F**	**F**	C	C	Yes	Basic	4,280	17.1	B	4,370	16.5	B	Extend auxillary lane beyond off-ramp	
								On-Ramp	2,020	20.4	C	1,690	18.4	B		
								Off-Ramp	330	21.2	C	540	21.7	C		
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	C	C	D	**E**	Yes	Weaving	4,670	19.1	B	3,700	28.7	D	Add 1 mixed flow lane	

Indicates that the LOS exceeds the target level

			Southbound / Westbound													
			Determination of Impact					Existing Plus Phase 1 & Mitigations								
									AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Sgement type	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS										
W-23	SR-60	University Ave to Martin Luther King	**E**	**E**	**F**	**F**	Yes	Weaving	5,580	29.5	D	5,820	35.4	**E**	Add 1 mixed flow lane	
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	D	D	D	**E**	Yes	Weaving	6,940	26.8	C	7,100	28.0	D	Add 1 mixed flow lane	
W-48	SR-91	Arlington Ave to Central Ave	D	D	**E**	**E**	Yes	Weaving	5,870	25.8	C	7,590	28.3	D	Add 1 mixed flow lane	

Indicates that the LOS exceeds the target level

Freeway Ramp Analysis. Existing (2018) with Phase 1 freeway ramp levels of service for the study area are summarized in Table 4.15-27, which identifies the one ramp segment where the Project would have a significant impact.

- SR-60 eastbound On-Ramp from Martin Luther King Blvd.

Table 4.15-27: Existing Plus Phase 1 Freeway Ramp LOS

				Existing Conditions								Existing Plus Phase 1 Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	9,134	266	37.1	F	8,384	1,016	34.3	F	9,360	380	40.4	F	8,280	1,040	34.3	F
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,529	450	14.5	B	6,913	1,206	22.2	C	5,760	500	15.1	B	6,780	1,230	22.3	C
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,757	278	3.3	A	2,053	543	4.9	A	1,860	430	4.9	A	2,140	560	5.9	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,575	96	15.4	B	1,609	99	14.7	B	1,740	110	17.7	B	1,730	120	16.6	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,671	133	18.6	B	1,708	40	17.8	B	1,850	410	21.1	C	1,850	420	19.9	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,569	31	17.9	B	1,703	35	18.1	B	1,580	20	18.0	B	1,580	20	17.1	B
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,600	335	17.9	B	1,738	428	18.1	B	See Weaving Analysis				See Weaving Analysis			
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,264	7	14.2	B	1,310	9	13.8	B	1,260	10	14.2	B	1,270	10	13.6	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	1,121	10	13.3	B	1,165	10	13.6	B	1,770	10	13.5	B	1,670	10	13.3	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	1,111	349	15.3	B	1,155	331	15.6	B	See Weaving Analysis				See Weaving Analysis			
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,460	38	15.7	B	1,486	29	16.1	B	See Weaving Analysis				See Weaving Analysis			
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,422	59	12.8	B	1,457	47	13.1	B	1,660	680	15.8	B	1,840	410	15.0	B
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,481	73	16.4	B	1,504	73	16.7	B	2,340	150	20.0	B	2,250	90	19.0	B
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,427	390	15.6	B	1,448	434	16.3	B	2,290	410	18.0	B	2,300	510	17.8	B
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	606	2.8	A	7,050	498	3.3	A	6,940	670	2.6	A	7,100	520	3.9	A
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	595	22.2	C	6,885	976	24.8	C	6,490	600	22.1	C	6,370	980	25.4	C

Indicates that the LOS exceeds the target level

Table 4.15-28: Existing Plus Phase 1 Freeway Ramp Impacts and Mitigations

				Determination of Impact					Existing Plus Phase 1 & Mitigations								
				AM Peak Hour		PM Peak Hour			AM Peak Hour				PM Peak Hour				
ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	F	F	F	F	Yes	9,360	380	26.6	C	8,280	1,040	26.5	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

4.15.6.2 Existing (2018) With Project (Buildout) Conditions Traffic and Level of Service

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows: • Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C. • Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z. • Freeway mainline: LOS D. • Freeway Ramp Merge/Diverge: LOS D.

Impacts

Intersection Analysis. Existing baseline (2018) with project buildout intersection levels of service for the study area intersections are summarized in Table 4.15-29 and 4.15-30, which shows there are 25 study intersections where the LOS would exceed the general plan target. In 20 of these locations the LOS would have been worse than the target for at least one peak hour (AM or PM) even in the No Project scenario. The Project would cause the LOS to exceed the target in 2 locations that would otherwise have met the target in both peak hours, and in 3 cases the Project would case the LOS to exceed the target in both peak hours when it would otherwise have exceeded the target in only one of the peak hours (AM or PM). The intersections with poor LOS under the Existing Plus Buildout Scenario are:

Would Exceed Threshold of Significance Under Both the Existing Conditions and the Existing Plus Buildout Scenario

- IN-10 Redlands Blvd./Locust Ave. (AM, PM)
- IN-20 Oliver St./Alessandro Blvd. (AM)
- IN-23 Redlands Blvd/Alessandro Blvd (PM)
- IN-37 Moreno Beach Dr./SR-60 EB Ramps (PM)
- IN-65 Perris Blvd./Cactus Ave. (AM)
- IN-83 Martin Luther King Blvd/Canyon Crest Dr. (AM)
- IN-85 Martin Luther King Blvd/I-215 NB Ramps (AM, PM)
- IN-86 Central Ave/Chicago Ave (PM)
- IN-94 Arlington Ave./Victoria Ave. (AM)

- IN-95 Alessandro Blvd./Chicago Ave. (PM)
- IN-107 Evans Rd./Rider St. (AM)
- IN-114 Evans Rd./Orange Ave. (AM, PM)
- IN-115 Evans Rd./Nuevo Rd. (AM)
- IN-122 Bridge St./Ramona Expy. (AM, PM)
- IN-123 Gilman Springs Rd./Bridge St. (AM, PM)
- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)
- IN-125 SR-79 (Sanderson Ave) SB/Gilman Springs Rd. (AM, PM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (AM)
- IN-133 San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- IN-134 Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Would Exceed Threshold of Significance Under the Existing Plus Buildout Scenario (only)

- IN-18 Redlands Blvd/Eucalyptus Ave (PM)
- IN-36 Moreno Beach Drive & Ironwood Avenue (AM)
- IN-37 Moreno Beach Dr./SR-60 EB Ramps (AM)
- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (PM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (PM),

Table 4.15-29: Existing (2018) Plus Project Intersection Levels of Service

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	7.6	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	14.3	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.2	B	RABT	7.4	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	6.7	A
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	12.3	B	SIGNAL	13.6	B
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	27.7	**D**	CSS	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	25.2	C	SIGNAL	29.4	C
IN-12	Theodore St/Ironwood Ave	D	CSS	8.5	A	CSS	8.5	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	16.3	B	SIGNAL	28.0	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	10.0	A	SIGNAL	23.2	C
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.7	A	SIGNAL	24.1	C
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.3	A	SIGNAL	4.0	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	4	A	SIGNAL	22.8	C
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.3	A	SIGNAL	28.9	C
IN-20	Oliver St/Alessandro Blvd	C	CSS	38.0	**E**	CSS	74.5	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	26.9	C	SIGNAL	34.1	C
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	23.7	C	AWS	17.6	C
IN-24	Oliver St/Cactus Ave	D	SIGNAL	20.8	C	SIGNAL	22.3	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	SIGNAL	16.5	B
IN-26	Quincy St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.5	B	AWS	22.7	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	20.5	C	SIGNAL	26.1	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	31.8	C	SIGNAL	32.1	C
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	23.2	C	SIGNAL	28.9	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	18.8	B	SIGNAL	22.2	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	25.9	C	SIGNAL	27.7	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	16.1	B	SIGNAL	19.8	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	19.4	B	SIGNAL	21.0	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.4	A	CSS	9.2	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	40.1	D	SIGNAL	59.5	**E**
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	30.7	C	SIGNAL	58.2	**E**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	28.6	C	SIGNAL	35.7	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	37.3	D	SIGNAL	46.0	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	21.7	C	SIGNAL	25.0	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	31.2	C	SIGNAL	38.5	D
IN-42	Nason St/Iris Ave	C	SIGNAL	16.1	B	SIGNAL	17.3	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	20.5	C	SIGNAL	25.0	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	11.9	B	SIGNAL	12.4	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	27.6	C	SIGNAL	33.1	C
IN-46	Kitching St/Krameria Ave	D	SIGNAL	19.5	B	SIGNAL	22.3	C
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	21.8	C	SIGNAL	23.3	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	24.9	C	SIGNAL	24.6	C

Table 4.15-29 Existing (2018) Plus Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	29.9	C	SIGNAL	31.4	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	9.1	A	SIGNAL	9.1	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	22.4	C	SIGNAL	23.0	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	27.3	C	SIGNAL	28.6	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	26.9	C	SIGNAL	28.3	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	26.3	C	SIGNAL	27.4	C
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	25.2	C	SIGNAL	25.9	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	20.8	C	SIGNAL	21.3	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	27.0	C	SIGNAL	28.3	C
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	22.7	C	SIGNAL	22.6	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	35.3	D	SIGNAL	35.6	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	10.6	B	SIGNAL	11.0	B
IN-62	Graham St/Cactus Ave	D	SIGNAL	20.0	C	SIGNAL	21.2	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	40.3	D	SIGNAL	40.9	D
IN-64	Indian St/Cactus Ave	C	SIGNAL	27.6	C	SIGNAL	28.8	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	68.4	**E**	SIGNAL	62.7	**E**
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	29.7	C	SIGNAL	30.1	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.3	A	SIGNAL	6.5	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	18.9	B	SIGNAL	20.0	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	24.7	C	SIGNAL	25.7	C
IN-70	Day St/Alessandro Blvd	D	SIGNAL	14.7	B	SIGNAL	16.1	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	18.4	B	SIGNAL	18.8	B
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	4.6	A	SIGNAL	6.8	A
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	35.6	D	SIGNAL	37.7	D
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	22.4	C	SIGNAL	20.8	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	23.0	C	SIGNAL	27.0	C
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	32.2	C	SIGNAL	24.8	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	12.5	B	SIGNAL	13.5	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	14.3	B	SIGNAL	26.3	C
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	35.0	C	SIGNAL	24.4	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	32.2	C	SIGNAL	40.7	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	44.6	D	SIGNAL	39.2	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	15.1	B	SIGNAL	17.4	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	71.0	**E**	SIGNAL	77.8	**E**
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	18.5	B	SIGNAL	19.8	B
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	40.2	**E**	AWS	40.4	**E**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	53.1	D	SIGNAL	41.4	D
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	14.5	B	SIGNAL	15.7	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	35.4	D	SIGNAL	33.6	C
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	8.1	A	SIGNAL	8.6	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.2	C	SIGNAL	39.0	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	13.5	B	SIGNAL	15.1	B
IN-92	Arlington Ave/Maude St	D	SIGNAL	21.5	C	SIGNAL	24.6	C
IN-93	Horace St/Arlington Ave	D	SIGNAL	11.8	B	SIGNAL	13.2	B

Table 4.15-29: Existing (2018) Plus Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	60.7	**E**	SIGNAL	62.7	**E**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	38.0	D	SIGNAL	39.6	D
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	27.0	C	SIGNAL	27.9	C
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	28.9	C	SIGNAL	30.2	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	32.8	C	SIGNAL	30.0	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	32.1	C	SIGNAL	33.0	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	15.4	B	SIGNAL	14.2	B
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	36.0	D	SIGNAL	41.6	D
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	55.3	E	SIGNAL	58.3	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	7.7	A	SIGNAL	9.7	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.3	C	SIGNAL	28.5	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	27.6	C	SIGNAL	28.1	C
IN-107	Evans Rd/Rider St	C	SIGNAL	41.3	**D**	SIGNAL	41.3	**D**
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	19.2	B	SIGNAL	20.4	C
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	>180	**F**	AWS	>180	**F**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	45.8	**D**	SIGNAL	42.9	**D**
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	43.6	**E**	CSS	64.1	**F**
IN-123	Gilman Springs Rd/Bridge St	C	CSS	75.8	**F**	CSS	90.3	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	150.8	**F**	CSS	>180	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	40.9	**E**	CSS	67.9	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	43.6	D	SIGNAL	35.8	D
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	17.5	B	SIGNAL	18.7	B
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	12.1	B	SIGNAL	12.4	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	18.0	B	SIGNAL	18.4	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	55.0	**F**	AWS	87.8	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	85.4	**F**	AWS	136.3	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	78.0	**F**	AWS	124.1	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	13.4	B	CSS	14.4	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.1	A	AWS	9.5	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 4.15-29: Existing (2018) Plus Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	7.5	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	14.2	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.2	B	RABT	7.6	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	6.4	A
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	29.4	D	SIGNAL	18.8	B
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	73.0	**F**	CSS	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	28.5	C	SIGNAL	47.0	D
IN-12	Theodore St/Ironwood Ave	D	CSS	8.5	A	CSS	9.2	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	21.2	C	SIGNAL	22.7	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	17.8	B	SIGNAL	20.9	C
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.1	A	SIGNAL	14.7	B
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.0	A	SIGNAL	2.3	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	2.6	A	SIGNAL	64.6	**E**
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.0	A	SIGNAL	20.4	C
IN-20	Oliver St/Alessandro Blvd	C	CSS	19.3	C	CSS	24.9	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	29.3	C	SIGNAL	36.3	D
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	33.7	**D**	AWS	29.7	**D**
IN-24	Oliver St/Cactus Ave	D	SIGNAL	17.1	B	SIGNAL	18.0	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	15.4	B	SIGNAL	16.4	B
IN-26	Quincy St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	10.6	B	AWS	22.5	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	18.7	B	SIGNAL	20.2	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	33.4	C	SIGNAL	41.9	D
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	20.8	C	SIGNAL	21.1	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	13.9	B	SIGNAL	14.2	B
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	36.3	D	SIGNAL	37.2	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	18.5	B	SIGNAL	18.9	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	18.5	B	SIGNAL	19.3	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	9.2	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	41.8	D	SIGNAL	50.6	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	61.8	**E**	SIGNAL	88.8	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	31.1	C	SIGNAL	34.3	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	56.6	**E**	SIGNAL	53.9	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	17.2	B	SIGNAL	21.1	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	34.4	C	SIGNAL	38.8	D
IN-42	Nason St/Iris Ave	C	SIGNAL	19.4	B	SIGNAL	15.8	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	15.0	B	SIGNAL	15.9	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	10.7	B	SIGNAL	11.5	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	20.7	C	SIGNAL	26.0	C
IN-46	Kitching St/Krameria Ave	D	SIGNAL	14.6	B	SIGNAL	16.0	B
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	19.5	B	SIGNAL	20.1	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	20.0	C	SIGNAL	20.8	C

Table 4.15-29: Existing (2018) Plus Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	22.5	C	SIGNAL	23.3	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	7.5	A	SIGNAL	7.5	A
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	19.4	B	SIGNAL	20.3	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	19.9	B	SIGNAL	20.5	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	28.8	C	SIGNAL	29.9	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	18.8	B	SIGNAL	20.0	C
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	26.3	C	SIGNAL	27.0	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	27.9	C	SIGNAL	30.5	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	36.7	D	SIGNAL	39.6	D
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	26.6	C	SIGNAL	28.0	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	34.5	C	SIGNAL	36.6	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	9.3	A	SIGNAL	9.5	A
IN-62	Graham St/Cactus Ave	D	SIGNAL	21.0	C	SIGNAL	22.4	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	31.8	C	SIGNAL	33.3	C
IN-64	Indian St/Cactus Ave	C	SIGNAL	23.1	C	SIGNAL	22.9	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	35.5	D	SIGNAL	35.6	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	29.0	C	SIGNAL	31.1	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	9.0	A	SIGNAL	8.4	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	13.0	B	SIGNAL	14.5	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	17.4	B	SIGNAL	18.4	B
IN-70	Day St/Alessandro Blvd	D	SIGNAL	14.5	B	SIGNAL	17.4	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	20.8	C	SIGNAL	21.4	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	14.4	B	SIGNAL	14.4	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	7.0	A	SIGNAL	7.8	A
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	26.5	C	SIGNAL	28.2	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	8.8	A	SIGNAL	14.0	B
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	53.6	D	SIGNAL	53.2	D
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	15.8	B	SIGNAL	25.1	C
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	9.4	A	SIGNAL	8.1	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	15.8	B	SIGNAL	15.8	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	27.8	C	SIGNAL	27.3	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	51.6	D	SIGNAL	45.8	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	10.9	B	SIGNAL	11.2	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	34.2	C	SIGNAL	33.7	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	7.4	A	SIGNAL	8.0	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	>180	**F**	AWS	>180	**F**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	91.4	**F**	SIGNAL	93.4	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	15.8	B	SIGNAL	16.7	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	39.6	D	SIGNAL	37.0	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	5.9	A	SIGNAL	6.0	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	24.2	C	SIGNAL	23.8	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	6.4	A	SIGNAL	6.9	A
IN-92	Arlington Ave/Maude St	D	SIGNAL	27.1	C	SIGNAL	27.6	C
IN-93	Horace St/Arlington Ave	D	SIGNAL	5.9	A	SIGNAL	6.5	A

Table 4.15-29: Existing (2018) Plus Project Intersection Levels of Service (Continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	39.0	D	SIGNAL	41.6	D
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	78.5	**E**	SIGNAL	67.7	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	11.1	B	SIGNAL	11.9	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	22.8	C	SIGNAL	28.3	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	34.4	C	SIGNAL	29.8	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	29.9	C	SIGNAL	30.0	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	20.1	C	SIGNAL	22.1	C
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	27.9	C	SIGNAL	28.7	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	36.1	D	SIGNAL	36.6	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	16.7	B	SIGNAL	15.2	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	21.3	C	SIGNAL	24.9	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	22.8	C	SIGNAL	23.6	C
IN-107	Evans Rd/Rider St	C	SIGNAL	28.4	C	SIGNAL	28.9	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	11.9	B	SIGNAL	13.5	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	39.0	**E**	AWS	41.3	**E**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	23.8	C	SIGNAL	22.4	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	111.0	**F**	CSS	143.6	**F**
IN-123	Gilman Springs Rd/Bridge St	C	CSS	84.5	**F**	CSS	126.3	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	146.0	**F**	CSS	146.8	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	115.4	**F**	CSS	134.4	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	29.7	C	SIGNAL	29.3	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	31.4	C	SIGNAL	34.1	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	14.0	B	SIGNAL	15.2	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	17.5	B	SIGNAL	18.9	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	23.1	C	AWS	37.0	**E**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	104.8	**F**	AWS	133.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	178.9	**F**	AWS	90.7	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	12.5	B	CSS	13.5	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.6	A	AWS	10.0	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 4.15-30: Existing (2018) Plus Project Intersection Impacts and Mitigations

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out			Existing Conditions			Existing Plus Build-out			Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Existing Plus Phase 1 & Mitigations				
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour		Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour			Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS		Delay	LOS		Delay	LOS		Delay	LOS			Delay	LOS	Delay	LOS
Intersection Impacts that can be Mitigated to a Less-Than-Signficant Level																				
IN-10	Redlands Blvd/Locust Ave	C	CSS	27.7	D	CSS	>180	F	CSS	73.0	F	CSS	>180	F	Signalize. Add 1 EB LT and 1 WB LT.	SIGNAL	7.7	A	10.6	B
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	4	A	SIGNAL	22.8	C	SIGNAL	2.6	A	SIGNAL	64.6	E	Add WB RT pocket.	SIGNAL	21.1	C	31.5	C
IN-20	Oliver St/Alessandro Blvd	C	CSS	38.0	E	CSS	74.5	F	CSS	19.3	C	CSS	24.9	C	Add TWLTL on Alessandro Blvd. for 2-stage gap acceptance.	CSS	21.2	C	14.9	B
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	40.1	D	SIGNAL	59.5	E	SIGNAL	41.8	D	SIGNAL	50.6	D	Add 1 NB RT lane.	SIGNAL	38.0	D	27.9	C
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	30.7	C	SIGNAL	58.2	E	SIGNAL	61.8	E	SIGNAL	88.8	F	Add 1 SB LT Change Phasing to Prot.	SIGNAL	16.2	B	30.3	C
Intersection Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)																				
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	71.0	E	SIGNAL	77.8	E	SIGNAL	34.2	C	SIGNAL	33.7	C	change 1 NBT to NBT-R	SIGNAL	34.3	C	40.3	D
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	40.2	E	AWS	40.4	E	AWS	>180	F	AWS	>180	F	Signalize.	AWS	1.0	A	0.9	A
IN-86	Central Ave/Chicago Ave	D	SIGNAL	53.1	D	SIGNAL	41.4	D	SIGNAL	91.4	F	SIGNAL	93.4	F	Change WBT to WBT-R and NBT to NBT-R	SIGNAL	28.4	C	45.6	D
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	60.7	E	SIGNAL	62.7	E	SIGNAL	39.0	D	SIGNAL	41.6	D	Change WB approach to one left (375 ft storage - existing), 2 through and 1 right (100 ft storage)	SIGNAL	47.4	D	32.7	C
IN-114	Evans Rd/Orange Ave	C	AWS	>180	F	AWS	>180	F	AWS	39.0	E	AWS	41.3	E	Signalize	SIGNAL	92.1	F	13.5	B
IN-122	Bridge St/Ramona Expy	C	CSS	43.6	E	CSS	64.1	F	CSS	111.0	F	CSS	143.6	F	Signalize.	SIGNAL	13.4	B	14.6	B
IN-123	Gilman Springs Rd/Bridge St	C	CSS	75.8	F	CSS	90.3	F	CSS	84.5	F	CSS	126.3	F	Signalize.	SIGNAL	7.6	A	21.1	C
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	150.8	F	CSS	>180	F	CSS	146.0	F	CSS	146.8	F	Signalize.	SIGNAL	8.2	A	7.2	A
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	40.9	E	CSS	67.9	F	CSS	115.4	F	CSS	134.4	F	Signalize.	SIGNAL	8.6	A	8.0	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	55.0	F	AWS	87.8	F	AWS	19.8	C	AWS	37.0	E	Signalize.	SIGNAL	11.2	B	7.9	A
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	85.4	F	AWS	136.3	F	AWS	26.9	D	AWS	133.0	F	Signalize.	SIGNAL	17.7	B	12.8	B
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	78.0	F	AWS	124.1	F	AWS	55.0	F	AWS	90.7	F	Signalize. Add 1 EB Right Turn and 1 NB Left Turn.	SIGNAL	8.9	A	10.0	B

Notes:

"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively
Indicates LOS exceeds the target level
"CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout
When refering to lanes, "T" demotes a through lane
When refering to lanes, "L" demotes a left-turn lane
When refering to lanes, "R" demotes a right-turn lane

Roadway Analysis. Existing baseline (year 2018) with project roadway segment levels of service for the study area are summarized in Table 4.15-30, which shows three roadway segments would operate at unsatisfactory levels of service.

The project would worsen the existing LOS deficiency at the following three roadway segments under existing with project conditions:

- Gilman Springs Rd. between SR-60 and Alessandro Blvd. exceeds the target LOS under both Existing Conditions and under the Existing Plus Build-out Scenario.
- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. exceeds the threshold of significance under both Existing Conditions and under the Existing Plus Build-out Scenario.
- Redlands Boulevard from Eucalyptus Avenue to the SR-60 eastbound ramps.

Freeway Segment Analysis. Existing (2018) with project freeway segment levels of service for the study area are summarized in Table 4.15-31, which shows 24 freeway segments would operate at unsatisfactory levels of service. The Project would have impacts at:

Northbound or Eastbound

- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-60 from Pierce St. to Magnolia Ave.
- SR-91 from Adams St. to Madison St.
- SR-91 from Central Ave. to 14th St.
- I-215 from Eucalyptus Ave. to SR-60
- I-215 from Auto Plaza Dr. to Mill St.

Southbound or Westbound

- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-91 from McKinley St. to Pierce St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Tyler St. to Van Buren Blvd.
- SR-91 from Van Buren Blvd. to Adams St.
- I-215 from Center St. to La Cadena Dr.
- I-215 from La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

Table 4.15-31: Existing (2018) plus Project Roadway Segment Levels of Service

	Roadway	From	To	LOS Standard*	Existing Conditions			Existing Plus Build-out Conditions			Project Impact Significant?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section**	Daily Volume	LOS			
S-1	Theodore St	SR-60 WB Ramps	Ironwood Ave	D	2U	1,174	A	2U	3,670	A			
S-2	World Logistics Center Pkwy (A)	SR-60 EB Ramps	Eucalyptus Ave	D	2U	2,246	A	4D	32,466	D			
S-3	Eucalyptus Ave	Redlands Blvd	World Logistics Center Pkwy (A)	D	2U***	797	A	2U	3,712	A			
S-4	Eucalyptus Ave (Street B)	World Logistics Center Pkwy (A)	Gilman Springs Rd	N/A	Future Road			Future Road					
S-5	World Logistics Center Pkwy (A)	Eucalyptus Ave	Street E/Street F	D	2U	1,120	A	6D	33,184	A			
S-6	Street E	World Logistics Center Pkwy (A)	Cactus Ave Extension	N/A	Future Road			4U	3,448	A			
S-7	Street F	World Logistics Center Pkwy (A)	Alessandro Blvd (Street C)	N/A	Future Road			2U	8,262	B			
S-8	World Logistics Center Pkwy (A)	Street E/Street F	Alessandro Blvd (Street C)	D	2U	1,120	A	4D	13,283	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	World Logistics Center Pkwy (A)	D	2U	3,479	A	4U	11,714	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave	N/A	Future Road			4U	15,602	B			
S-11	Alessandro Blvd (Street C)	World Logistics Center Pkwy (A)	Street F	D	2U	2,801	A	4U	7,503	A			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,801	A	4U	8,746	A			
S-14	Alessandro Blvd	Moreno Beach Dr	Redlands Blvd	D	2U	5,305	A	2U	6,512	A			
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	D	2U	22,065	**F**	2U	21,405	**F**	Yes	Widen to 4 lanes	D
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	19,394	**F**	2U	18,693	**F**	Yes	Widen to 4 lanes	C
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	D	2U	11,346	**E**	2U	13,002	**F**	Yes	Widen to 4 lanes	A
S-19	Redlands Blvd	Eucalyptus Ave	Alessandro Blvd	C	2U	8,914	C	2U	7,890	B			
S-20	Alessandro Blvd	Redlands Blvd	Merwin St	C	2U	5,325	A	2U	300	A			
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave	C	2U	8,149	B	2U	6,857	A			
S-22	Cactus Ave	Redlands Blvd	Cactus Ave Extension	C	2U***	527	A	4U	13,902	A			

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

Table 4.15-32: Existing (2018) plus Project Freeway Mainline Levels of Service

ID	Freeway	Segment	Existing Conditions						Existing Plus Project Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	26.7	D	6,467	27.6	D	6280	28.5	D	6,330	27.1	D
F-3	SR-60	Ramona Ave to Central Ave	8,109	38.6	**E**	9,400	47.3	**F**	8,380	41.6	**E**	9,240	45.9	**F**
F-4	SR-60	Central Ave to Mountain Ave	7,190	31.3	D	8,271	36.3	**E**	7,480	33.7	D	8,120	35.4	**E**
F-5	SR-60	Mountain Ave to Euclid Ave	7,513	33.6	D	8,231	36.0	**E**	7,810	36.3	**E**	8,060	35.0	D
F-6	SR-60	Euclid Ave to Grove Ave	7,423	33.0	D	8,339	36.9	**E**	7,720	35.5	**E**	8,180	35.9	**E**
F-7	SR-60	Grove Ave to Vineyard Ave	6,809	28.9	D	9,236	45.4	**F**	7,080	30.8	D	9,080	44.2	**E**
F-8	SR-60	Vineyard Ave to Archibald Ave	6,662	27.8	D	9,400	47.3	**F**	6,950	29.7	D	9,210	45.6	**F**
F-9	SR-60	Archibald Ave to Haven Ave	6,718	28.1	D	6,764	26.6	D	7,010	30.4	D	6,560	25.9	C
F-10	SR-60	Haven Ave to Milliken Ave	7,667	25.4	C	7,366	22.5	C	7,970	27.1	D	7,150	22.0	C
F-11	SR-60	Milliken Ave to I-15	4,225	16.8	B	5,182	19.4	C	4,500	18.0	C	5,000	18.9	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	3,541	14.0	B	4,369	16.3	B	3,890	15.6	B	4,100	15.5	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	2,913	11.5	B	3,567	13.3	B	3,340	13.4	B	3,400	12.9	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	2,437	9.8	A	2,959	11.3	B	2,860	11.7	B	2,770	10.9	A
F-15	SR-60	Pedley Rd to Pyrite St	2,650	10.7	A	3,232	12.3	B	3,020	12.3	B	3,130	12.2	B
F-16	SR-60	Pyrite St to Valley Way	3,348	13.3	B	3,642	13.8	B	3,750	15.1	B	3,520	13.6	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,515	24.5	C	5,262	28.0	D	4,900	27.6	D	5,130	27.5	D
F-18	SR-60	Rubidoux Blvd to Market St	4,697	25.7	C	5,477	29.8	D	4,950	28.0	D	5,310	29.1	D
F-19	SR-60	Market St to Main St	4,971	27.8	D	6,433	39.2	**E**	5,310	31.1	D	6,220	37.5	**E**
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,400	59.2	**F**	9,400	51.1	**F**	9,870	77.2	**F**	9,250	52.7	**F**
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	5,188	20.4	C	6,193	23.6	C	5,530	22.5	C	6,190	24.2	C
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,828	23.2	C	4,700	47.8	**F**	2,990	26.3	D	4,690	51.1	**F**
F-30	SR-60	Heacock St to Perris Blvd	2,529	20.2	C	3,336	25.9	C	2,880	24.7	C	3,190	25.9	C
F-31	SR-60	Perris Blvd to Nason St	2,269	17.9	B	2,843	21.3	C	2,550	21.5	C	2,750	21.8	C
F-32	SR-60	Nason St to Moreno Beach Dr	1,977	10.5	A	2,468	12.3	B	2,100	11.9	B	2,430	12.8	B
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,757	9.4	A	2,053	10.2	A	1,780	10.3	A	2,050	10.9	A
F-34	SR-60	Redlands Blvd to Theodore St	1,671	13.4	B	1,708	12.8	B	1,910	16.3	B	1,870	15.2	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,600	12.9	B	1,738	13.0	B	See Weaving Analysis			See Weaving Analysis		
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,271	13.5	B	1,319	12.3	B	1,260	14.4	B	1,240	12.5	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,272	10.2	A	1,317	10.0	A	1,270	10.4	A	1,240	9.5	A
F-39	SR-91	I-15 to McKinley St	4,206	15.7	B	6,373	26.2	D	4,380	16.6	B	6,300	25.9	C
F-40	SR-91	McKinley St to Pierce St	4,797	24.9	C	5,269	30.0	D	4,950	26.1	D	5,210	29.7	D
F-41	SR-91	Pierce St to Magnolia Ave	6,354	39.4	**E**	7,050	54.7	**F**	6,520	42.0	**E**	7,010	54.6	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	7,050	28.6	D	7,050	30.4	D	7,180	29.5	D	7,010	30.4	D
F-44	SR-91	Tyler St to Van Buren Blvd	7,101	28.7	D	7,990	37.2	**E**	7,200	29.4	D	7,950	37.2	**E**
F-45	SR-91	Van Buren Blvd to Adam St	4,763	17.8	B	4,956	19.4	C	4,810	18.2	C	4,940	19.5	C
F-46	SR-91	Adam St to Madison St	7,451	57.6	**F**	8,209	96.0	**F**	7,530	60.3	**F**	8,190	97.1	**F**

Table 4.15-32 Existing (2018) plus Project Freeway Mainline Levels of Service (Continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Project Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,677	33.1	D	5,386	21.5	C	7,720	33.6	D	5,370	21.6	C
F-49	SR-91	Central Ave to 14th St	7,050	52.1	**F**	5,797	35.9	**E**	6,970	51.2	**F**	5,810	36.4	**E**
F-50	SR-91	14th St to University Ave	4,644	17.4	B	4,194	16.3	B	4,550	17.1	B	4,280	16.7	B
F-51	SR-91	University Ave to Spruce St	5,924	17.9	B	5,450	17.2	B	5,850	17.8	B	5,530	17.4	B
F-66	I-215	Scott Rd to Newport Rd	2,739	14.4	B	3,285	16.4	B	2,670	14.1	B	3,270	16.3	B
F-68	I-215	Newport Rd to McCall Blvd	1,900	10.0	A	2,047	10.2	A	1,790	9.5	A	2,030	10.2	A
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	12.9	B	3,293	16.4	B	2,280	12.1	B	3,280	16.4	B
F-70	I-215	Ethanac Rd to SR-74	3,787	20.1	C	3,150	15.7	B	3,590	19.0	C	3,140	15.7	B
F-71	I-215	SR-74 to Redlands Ave	3,350	17.9	B	4,181	21.4	C	3,090	16.6	B	4,190	21.5	C
F-86	I-215	Redlands Blvd to D St	4,431	24.1	C	3,185	16.0	B	4,210	22.6	C	3,220	16.2	B
F-87	I-215	D St to Nuevo St/Harvil Ave	3,500	13.8	B	4,813	18.0	C	3,290	13.1	B	4,800	18.1	C
F-88	I-215	Nuevo St to Ramona Expy	4,515	24.8	C	5,262	28.4	D	4,460	24.4	C	5,240	28.2	D
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox	4,913	27.7	D	5,947	34.3	D	4,870	27.4	D	5,950	34.4	D
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	5,097	29.0	D	4,415	22.9	C	5,030	28.5	D	4,460	23.2	C
F-92	I-215	Van Buren Blvd to Cactus Ave	4,817	19.2	C	4,206	15.7	B	4,740	18.8	C	4,230	15.9	B
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,515	24.8	C	5,262	28.4	D	4,400	24.1	C	5,400	29.7	D
F-95	I-215	Eucalyptus Ave to SR-60	4,877	27.5	D	5,885	33.7	D	4,770	26.6	D	6,110	36.0	**E**
F-74	I-215	Columbia Ave to Center St	6,697	28.8	D	7,050	28.6	D	6,650	28.7	D	7,100	28.9	D
F-75	I-215	Center St to La Cadena Dr	5,146	29.7	D	5,293	28.4	D	5,110	29.6	D	5,330	28.7	D
F-76	I-215	La Cadena Dr to Barton Rd	5,191	29.8	D	4,937	25.8	C	5,150	29.5	D	5,010	26.3	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,708	35.3	**E**	5,640	32.0	D	5,650	35.0	**E**	5,740	32.9	D
F-78	I-215	Mt. Vernon Ave to I-10	6,088	25.8	C	5,802	22.5	C	6,040	25.5	C	5,930	23.1	C
F-80	I-215	Auto Plaza Dr to Mill St	5,201	20.7	C	9,400	47.9	**F**	5,150	20.5	C	9,480	48.9	**F**
F-83	I-215	Baseline Rd to Highland Ave	3,158	12.5	B	4,700	17.6	B	3,130	12.5	B	4,760	17.8	B
F-52	I-10	SR-60 to Beaumont Ave	3,462	13.6	B	4,847	18.8	C	3,500	13.8	B	4,730	18.4	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,519	14.0	B	4,927	19.4	C	3,520	14.1	B	4,860	19.2	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,689	14.6	B	5,165	20.4	C	3,670	14.6	B	5,080	20.0	C
F-55	I-10	Highland Springs Ave to Sunset Ave	3,547	14.1	B	4,966	19.6	C	3,500	14.0	B	4,960	19.5	C
F-56	I-10	Sunset Ave to 22nd St	3,462	11.0	B	4,847	15.2	B	3,410	10.9	A	4,850	15.2	B
F-57	I-10	22nd St to 8th St	3,406	13.6	B	4,768	18.7	C	3,350	13.4	B	4,770	18.8	C
F-58	I-10	8th St to Hargrave St	3,406	13.6	B	4,768	18.7	C	3,340	13.4	B	4,780	18.9	C
F-59	I-10	Hargrave St to Fields Rd	3,065	12.3	B	4,291	16.9	B	2,980	12.0	B	4,310	17.0	B
F-60	I-10	Fields Rd to Morongo Trail	2,923	11.7	B	4,092	16.1	B	2,840	11.4	B	4,120	16.3	B
F-61	I-10	Morongo Trail to Main St	2,583	10.2	A	3,616	14.0	B	2,500	10.0	A	3,650	14.2	B
F-62	I-10	Main St to Haugen-Lehmann Way	2,583	10.1	A	3,616	14.0	B	2,500	9.8	A	3,660	14.2	B
F-64	I-10	SR-111 to Tipton Rd	2,242	8.8	A	3,139	12.1	B	2,190	8.6	A	3,180	12.3	B
F-65	I-10	Tipton Rd to SR-62	2,242	8.8	A	3,139	12.1	B	2,190	8.6	A	3,180	12.3	B

Indicates that the LOS exceeds the target level

Table 4.15-32: Existing (2018) plus Project Freeway Mainline Levels of Service (Continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Project Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,638	26.3	D	6,223	24.8	C	6,470	25.7	C	6,410	26.1	D
F-3	SR-60	Ramona Ave to Central Ave	6,167	24.4	C	6,459	26.1	D	6,000	24.0	C	6,640	27.4	D
F-4	SR-60	Central Ave to Mountain Ave	6,751	28.4	D	6,489	26.9	D	6,580	27.7	D	6,690	28.5	D
F-5	SR-60	Mountain Ave to Euclid Ave	6,859	28.8	D	6,883	29.0	D	6,700	28.2	D	7,080	30.7	D
F-6	SR-60	Euclid Ave to Grove Ave	7,108	29.3	D	7,527	32.6	D	6,940	28.7	D	7,720	34.3	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,656	26.2	D	9,400	51.0	**F**	6,480	25.6	C	9,600	54.7	**F**
F-8	SR-60	Vineyard Ave to Archibald Ave	7,821	34.9	D	9,400	53.0	**F**	7,620	34.0	D	9,590	56.8	**F**
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	7,339	22.4	C	5,698	17.5	B	7,140	22.0	C	5,920	18.4	C
F-11	SR-60	Milliken Ave to I-15	5,456	20.8	C	5,111	19.6	C	5,200	20.0	C	5,350	20.9	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,888	14.7	B	4,648	14.3	B	4,630	14.2	B	4,940	15.4	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	5,070	19.2	C	5,970	23.7	C	4,880	18.8	C	6,290	25.7	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	4,277	16.3	B	4,958	19.3	C	4,060	15.7	B	5,270	20.9	C
F-15	SR-60	Pedley Rd to Pyrite St	4,296	16.3	B	4,981	19.4	C	4,040	15.6	B	5,310	21.0	C
F-16	SR-60	Pyrite St to Valley Way	4,326	16.4	B	5,020	19.6	C	4,070	15.8	B	5,340	21.2	C
F-17	SR-60	Valley Way to Rubidoux Blvd	4,515	23.2	C	5,262	29.2	D	4,400	23.1	C	5,550	32.4	D
F-18	SR-60	Rubidoux Blvd to Market St	4,697	24.1	C	5,477	30.6	D	4,270	22.0	C	5,760	34.0	D
F-19	SR-60	Market St to Main St	6,485	40.3	**E**	5,115	27.9	D	6,050	36.3	**E**	5,380	30.7	D
F-20	SR-60	Main to SR-91	7,050	47.9	**F**	4,062	21.0	C	6,610	42.8	**E**	4,500	24.1	C
F-24	SR-60	Martin Luther King Blvd to Central Ave	7,050	33.3	D	6,885	30.5	D	6,870	34.9	D	7,000	34.1	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,385	30.6	D	8,085	36.9	**E**	7,170	30.1	D	8,340	40.2	**E**
F-27	SR-60	I-215 to Day St	4,328	41.6	**E**	3,251	26.8	D	4,280	43.6	**E**	3,220	28.1	D
F-29	SR-60	Pigeon Pass Rd to Heacock St	4,700	49.0	**F**	2,786	21.9	C	4,740	54.0	**F**	2,850	23.9	C
F-30	SR-60	Heacock St to Perris Blvd	3,192	25.1	C	3,003	24.0	C	3,280	27.8	D	3,120	26.9	D
F-31	SR-60	Perris Blvd to Nason St	2,592	19.5	C	2,695	21.0	C	2,740	22.2	C	2,890	24.4	C
F-32	SR-60	Nason St to Moreno Beach Dr	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,817	14.0	B	1,882	14.7	B	1,980	16.6	B	1,890	16.1	B
F-34	SR-60	Redlands Blvd to Theodore St	1,481	11.6	B	1,504	11.8	B	1,860	15.8	B	1,630	13.8	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,460	11.4	B	1,486	11.7	B	See Weaving Analysis			See Weaving Analysis		
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,121	13.4	B	1,165	12.7	B	1,130	14.4	B	1,090	13.0	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,121	9.0	A	1,165	9.3	A	1,130	9.2	A	1,090	8.9	A
F-39	SR-91	I-15 to McKinley St	6,576	26.3	D	7,158	31.4	D	6,470	25.9	C	7,290	32.5	D
F-40	SR-91	McKinley St to Pierce St	7,050	49.6	**F**	7,050	55.5	**F**	6,950	48.5	**F**	7,140	58.4	**F**
F-41	SR-91	Pierce St to Magnolia Ave	7,050	48.4	**F**	7,050	53.3	**F**	6,950	47.4	**F**	7,140	55.9	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	7,050	48.4	**F**	7,050	53.3	**F**	6,970	47.7	**F**	7,130	55.7	**F**
F-43	SR-91	La Sierra Ave to Tyler St	5,943	34.3	D	7,050	53.3	**F**	5,860	33.8	D	7,140	55.9	**F**
F-44	SR-91	Tyler St to Van Buren Blvd	6,106	23.6	C	7,990	37.2	**E**	6,050	23.5	C	8,050	38.1	**E**
F-45	SR-91	Van Buren Blvd to Adam St	6,381	25.0	C	7,990	37.2	**E**	6,310	24.8	C	8,020	37.8	**E**
F-46	SR-91	Adam St to Madison St	5,931	22.8	C	7,582	33.9	D	5,870	22.7	C	7,590	34.2	D

Table 4.15-32: Existing (2018) plus Project Freeway Mainline Levels of Service (Continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Project Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,050	48.4	F	7,050	52.6	F	7,010	48.3	F	7,010	52.5	F
F-49	SR-91	Central Ave to 14th St	5,166	19.5	C	7,050	30.0	D	5,140	19.6	C	6,970	29.7	D
F-50	SR-91	14th St to University Ave	5,166	19.5	C	7,050	30.0	D	5,140	19.6	C	6,970	29.7	D
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,294	11.5	B	2,318	11.5	B	2,290	11.5	B	2,220	11.0	B
F-68	I-215	Newport Rd to McCall Blvd	2,528	12.6	B	3,111	15.4	B	2,530	12.7	B	2,950	14.6	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,528	12.6	B	3,111	15.4	B	2,530	12.7	B	2,950	14.6	B
F-70	I-215	Ethanac Rd to SR-74	2,882	14.4	B	3,854	19.1	C	2,910	14.6	B	3,660	18.2	C
F-71	I-215	SR-74 to Redlands Ave	4,515	23.2	C	4,700	24.1	C	4,560	23.6	C	4,540	23.2	C
F-86	I-215	Redlands Blvd to D St	2,538	12.7	B	2,634	13.1	B	2,600	13.1	B	2,490	12.4	B
F-87	I-215	D St to Nuevo St/Harvil Ave	3,380	12.7	B	3,249	12.1	B	3,450	13.0	B	3,110	11.6	B
F-88	I-215	Nuevo St to Ramona Expy	4,515	23.2	C	5,262	28.0	D	4,580	23.8	C	5,230	27.7	D
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox	2,658	13.3	B	5,310	28.1	D	2,690	13.5	B	5,230	27.5	D
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	3,802	19.7	C	7,050	46.7	F	3,890	20.2	C	6,990	45.8	F
F-92	I-215	Van Buren Blvd to Cactus Ave	3,572	13.4	B	6,195	23.6	C	3,640	13.7	B	6,180	23.5	C
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	5,031	26.7	D	6,129	35.5	E	5,180	27.7	D	6,060	34.9	D
F-95	I-215	Eucalyptus Ave to SR-60	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-74	I-215	Columbia Ave to Center St	7,050	29.6	D	7,050	28.4	D	7,090	29.8	D	7,000	28.1	D
F-75	I-215	Center St to La Cadena Dr	7,050	50.2	F	7,050	47.3	F	7,090	51.0	F	6,950	46.2	F
F-76	I-215	La Cadena Dr to Barton Rd	7,050	49.6	F	7,050	46.7	F	7,150	51.4	F	7,020	46.2	F
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,974	34.6	D	7,050	46.7	F	6,060	35.8	E	7,050	46.7	F
F-78	I-215	Mt. Vernon Ave to I-10	5,726	22.1	C	5,432	20.5	C	5,840	22.7	C	5,410	20.4	C
F-80	I-215	Auto Plaza Dr to Mill St	6,123	23.7	C	5,837	22.0	C	6,130	23.7	C	5,810	21.9	C
F-83	I-215	Baseline Rd to Highland Ave	4,700	17.6	B	3,704	13.7	B	4,680	17.5	B	3,680	13.6	B
F-52	I-10	SR-60 to Beaumont Ave	4,888	20.9	C	4,190	15.8	B	4,830	20.7	C	4,170	15.8	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,968	21.5	C	4,259	16.3	B	4,920	21.2	C	4,210	16.1	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	5,209	22.7	C	4,465	17.0	B	5,170	22.5	C	4,400	16.8	B
F-55	I-10	Highland Springs Ave to Sunset Ave	5,009	21.7	C	4,293	16.4	B	5,010	21.7	C	4,270	16.3	B
F-56	I-10	Sunset Ave to 22nd St	4,888	16.7	B	4,190	12.8	B	4,900	16.7	B	4,160	12.7	B
F-57	I-10	22nd St to 8th St	4,808	20.7	C	4,121	15.7	B	4,820	20.8	C	4,050	15.5	B
F-58	I-10	8th St to Hargrave St	4,808	20.7	C	4,121	15.7	B	4,830	20.8	C	4,050	15.5	B
F-59	I-10	Hargrave St to Fields Rd	4,327	18.6	C	3,709	14.2	B	4,360	18.7	C	3,620	13.9	B
F-60	I-10	Fields Rd to Morongo Trail	4,127	17.7	B	3,537	13.6	B	4,170	17.9	B	3,450	13.3	B
F-61	I-10	Morongo Trail to Main St	3,646	15.4	B	3,125	11.8	B	3,690	15.6	B	3,040	11.5	B
F-62	I-10	Main St to Haugen-Lehmann Way	3,646	15.4	B	3,125	11.7	B	3,700	15.6	B	3,040	11.4	B
F-64	I-10	SR-111 to Tipton Rd	3,165	13.4	B	2,713	10.2	A	3,210	13.6	B	2,640	9.9	A
F-65	I-10	Tipton Rd to SR-62	3,165	13.4	B	2,713	10.3	A	3,210	13.6	B	2,640	10.0	A

Indicates that the LOS exceeds the target level

Table 4.15-32: Existing (2018) plus Project Freeway Mainline Levels of Service (Continued)

			Northbound / Eastbound											
			Determination of Impact					Existing Plus Project & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Project LOS	No-Project LOS	Plus Project LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-3	SR-60	Ramona Ave to Central Ave	E	E	F	F	Yes	8,380	28.4	D	9,240	30.4	D	Add 1 mixed flow lane
F-5	SR-60	Mountain Ave to Euclid Ave	D	E	E	D	Yes	7,810	25.8	C	8,060	25.1	C	Add 1 mixed flow lane
F-6	SR-60	Euclid Ave to Grove Ave	D	E	E	E	Yes	7,720	25.4	C	8,180	25.6	C	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	F	F	F	F	Yes	9,870	41.2	E	9,250	33.2	D	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd to Heacock St	C	D	F	F	Yes	2,990	16.6	B	4,690	25.1	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	E	E	F	F	Yes	6,520	26.2	D	7,010	30.6	D	Add 1 mixed flow lane
F-46	SR-91	Adam St to Madison St	F	F	F	F	Yes	7,530	32.3	D	8,190	40.1	E	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	F	F	E	E	Yes	6,970	29.5	D	5,810	23.8	C	Add 1 mixed flow lane
F-95	I-215	Eucalyptus Ave to SR-60	D	D	D	E	Yes	4,770	19.0	C	6,110	23.6	C	Add 1 mixed flow lane
F-80	I-215	Auto Plaza Dr to Mill St	C	C	F	F	Yes	5,150	16.3	B	9,480	31.7	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

			Southbound / Westbound											
			Determination of Impact					Existing Plus Project & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Project LOS	No-Project LOS	Plus Project LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-7	SR-60	Grove Ave to Vineyard Ave	D	C	F	F	Yes	6,480	19.7	C	9,600	34.0	D	Add 1 mixed flow lane
F-8	SR-60	Vineyard Ave to Archibald Ave	D	D	F	F	Yes	7,620	24.6	C	9,590	34.8	D	Add 1 mixed flow lane
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	D	D	E	E	Yes	7,170	22.4	C	8,340	27.8	D	Add 1 mixed flow lane
F-27	SR-60	I-215 to Day St	E	E	D	D	Yes	4,280	23.1	C	3,220	17.5	B	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd to Heacock St	F	F	C	C	Yes	4,740	25.8	C	2,850	15.5	B	Add 1 mixed flow lane
F-40	SR-91	McKinley St to Pierce St	F	F	F	F	Yes	6,950	28.6	D	7,140	31.7	D	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	F	F	F	F	Yes	6,950	28.2	D	7,140	31.0	D	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sierra Ave	F	F	F	F	Yes	6,970	28.3	D	7,130	30.9	D	Add 1 mixed flow lane
F-43	SR-91	La Sierra Ave to Tyler St	D	D	F	F	Yes	5,860	22.6	C	7,140	31.0	D	Add 1 mixed flow lane
F-44	SR-91	Tyler St to Van Buren Blvd	C	C	E	E	Yes	6,050	18.3	C	8,050	26.7	D	Add 1 mixed flow lane
F-45	SR-91	Van Buren Blvd to Adam St	C	C	E	E	Yes	6,310	19.1	C	8,020	26.6	D	Add 1 mixed flow lane
F-75	I-215	Center St to La Cadena Dr	F	F	F	F	Yes	7,090	29.4	D	6,950	27.8	D	Add 1 mixed flow lane
F-76	I-215	La Cadena Dr to Barton Rd	F	F	F	F	Yes	7,150	29.6	D	7,020	27.8	D	Add 1 mixed flow lane
F-77	I-215	Barton Rd to Mt. Vernon Ave	D	E	F	F	Yes	6,060	23.6	C	7,050	28.0	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

Freeway Weaving Analysis. Existing (2018) with project freeway weaving segment levels of service for the study area are summarized in Table 4.15-32, which shows five freeway weaving segments would operate at unsatisfactory levels of service.

The project would worsen the existing LOS deficiency at the following five freeway weaving segments under existing with project conditions:

Northbound or Eastbound

- I-215 from Main St. to SR-91
- I-215 from I-10 to Auto Plaza Dr./Orange Show Rd.

Southbound or Westbound

- SR-60 from University Ave. to Martin Luther King Blvd.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from Arlington Ave. to Central Ave

Table 4.15-33: Existing (2018) plus Project Freeway Weaving Segments Levels of Service

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Project Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,335	21	C	6,819	25	C	5,590	22	C	6,680	25	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	6,646	33.2	D	7,050	34.3	D	6,920	35.2	**E**	6,770	33.1	D
W-21	SR-60	SR-91 to Blaine St/3rd St	6,137	25.2	C	9,400	42.1	**E**	6,410	26.9	C	9,130	41.3	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	6,061	23.1	C	7,050	28.9	D	6,310	24.7	C	6,850	28.5	D
W-23	SR-60	University Ave to Martin Luther King	5,965	22.6	C	7,050	24.6	C	6,260	24.2	C	6,900	24.5	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	5,979	25.0	C	8,119	31.6	D	6,440	28.4	D	8,000	32.3	D
W-27	SR-60	I-215 to Day St	3,040	11.9	B	9,400	41.9	**E**	3,370	13.6	B	9,230	41.7	**E**
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick	3,197	14.4	B	7,050	32.7	D	3,340	15.4	B	6,980	32.8	D
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-35	SR-61	Theodore St to Gilman Springs Rd	See Basic Analysis			See Basic Analysis			1,580	9.5	A	1,410	8.2	A
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,925	32.1	D	7,050	34.8	D	7,070	33.0	D	6,980	34.6	D
W-48	SR-91	Arlington Ave to Central Ave	7,050	26.5	C	4,922	19.0	B	7,050	26.9	C	4,900	19.0	B
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-93	I-215	Cactus Ave to Alessandro Blvd	4,515	23.1	C	5,262	24.1	C	4,470	23.1	C	5,350	24.7	C
W-95	I-215	Eucalyptus Ave to SR-60	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	4,275	> Capacity	**F**	4,317	22.0	C	4,260	>Capacity	**F**	4,380	22.5	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,300	23.3	C	9,400	35.0	D	6,250	23.1	C	9,460	35.3	**E**
W-81	I-215	Mill St to 2nd St	5,888	22.2	C	7,050	26.6	C	5,840	22.1	C	7,100	26.8	C
W-82	I-215	5th St to Baseline Rd	4,255	12.6	B	7,050	21.8	C	4,220	12.5	B	7,110	22.0	C
W-63	I-10	Haugen-Lehmann Way to SR-111	2,583	8.7	A	3,616	12.1	B	2,500	8.4	A	3,660	12.3	B

Indicates that the LOS exceeds the target level

Table 4.15-33: Existing (2018) plus Project Freeway Weaving Segments Levels of Service (Continued)

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Project Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,466	19.6	B	5,871	21.3	C	5,320	19.2	B	6,060	22.4	C
W-9	SR-60	Haven Ave to Archibald Ave	6,671	26.3	C	7,844	33.1	D	6,480	25.7	C	8,040	34.2	D
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	5,660	21.3	C	5,717	21.6	C	5,480	21.0	C	5,840	22.5	C
W-22	SR-60	Blaine St/3rd St to University Ave	6,568	22.6	C	6,273	22.6	C	6,390	22.5	C	6,410	23.6	C
W-23	SR-60	University Ave to Martin Luther King	7,050	38.2	**E**	7,050	44.9	**F**	6,850	37.7	**E**	7,160	46.6	**F**
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,050	34.2	D	7,050	34.5	D	6,890	35.2	**E**	7,160	37.2	**E**
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick	4,700	30.6	D	3,279	20.4	C	4,690	31.4	D	3,350	21.9	C
W-32	SR-60	Moreno Beach Dr to Nason St	2,207	12.1	B	2,252	12.5	B	2,370	13.8	B	2,220	13.1	B
W-35	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			1,030	6.0	A	1,370	8.3	A
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,050	33.4	D	7,050	36.0	**E**	6,940	33.0	D	7,030	36.3	**E**
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	8,102	29.2	D	11,750	> Capacity	**F**	8,140	29.5	D	11,670	>Capacity	**F**
W-93	I-215	Cactus Ave to Alessandro Blvd	5,036	23.0	C	6,139	28.5	D	5,160	23.7	C	6,060	28.2	D
W-95	I-215	Eucalyptus Ave to SR-60	6,019	21.4	C	7,017	25.6	C	6,220	22.1	C	6,860	25.0	C
W-73	I-215	SR-60 to Columbia Ave	7,050	35.1	**E**	7,050	34.9	D	7,010	35.1	**E**	6,990	34.6	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,311	21.8	C	6,261	21.9	C	6,310	21.8	C	6,200	21.8	C
W-81	I-215	Mill St to 2nd St	7,050	24.5	C	6,421	22.7	C	7,060	24.6	C	6,370	22.6	C
W-82	I-215	5th St to Baseline Rd	7,050	22.5	C	5,762	18.0	B	7,060	22.5	C	5,740	17.9	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,646	13.9	B	3,125	11.7	B	3,700	14.2	B	3,040	11.4	B

Indicates that the LOS exceeds the target level

Table 4.15-33: Existing (2018) plus Project Freeway Weaving Segments Levels of Service

			Northbound / Eastbound													
			Determination of Impact					Existing Plus Project& Mitigations								
									AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Sgement type	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Project LOS	No-Project LOS	Plus Project LOS										
W-20	SR-60	Main St to SR-91	D	**E**	D	D	Yes	Weaving	6,920	27.4	C	6,770	25.8	C	Add 1 mixed flow lane	
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	C	C	D	**E**	Yes	Weaving	6,250	19.0	B	9,460	28.8	D	Add 1 mixed flow lane	

Indicates that the LOS exceeds the target level

			Southbound / Westbound													
			Determination of Impact					Existing Plus Project& Mitigations								
									AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Sgement type	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Freeway / Ramp Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Project LOS	No-Project LOS	Plus Project LOS										
W-23	SR-60	University Ave to Martin Luther King	**E**	**E**	**F**	**F**	Yes	Weaving	6,850	29.3	D	7,160	36.0	**E**	Add 1 mixed flow lane	
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	D	**E**	D	**E**	Yes	Weaving	6,890	27.4	C	7,160	28.9	D	Add 1 mixed flow lane	
W-48	SR-91	Arlington Ave to Central Ave	D	D	**E**	**E**	Yes	Weaving	6,940	25.7	C	7,030	28.2	D	Add 1 mixed flow lane	

Indicates that the LOS exceeds the target level

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

Freeway Ramp Analysis. Existing (2018) with project freeway ramp levels of service for the study area are summarized in Table 4.15-34. The table identifies the one ramp segment where the Project would have a significant impact, namely:

- SR-60 eastbound On-Ramp from Martin Luther King Blvd.

Table 4.15-34: Existing (2018) plus Project Freeway Ramps Levels of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Existing Conditions								Existing Plus Project Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	9,134	266	37.1	F	8,384	1,016	34.3	F	9,134	266	41.9	F	8,384	1,016	34.1	F
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,529	450	14.5	B	6,913	1,206	22.2	C	5,529	450	15.6	B	6,913	1,206	22.2	C
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,757	278	3.3	A	2,053	543	4.9	A	1,757	278	4.7	A	2,053	543	5.7	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,575	96	15.4	B	1,609	99	14.7	B	1,575	96	18.5	B	1,609	99	17.3	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,671	133	18.6	B	1,708	40	17.8	B	1,671	133	22.1	C	1,708	40	20.7	C
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,569	31	17.9	B	1,703	35	18.1	B	1,569	31	18.0	B	1,703	35	15.8	B
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,600	335	17.9	B	1,738	428	18.1	B	See Weaving Analysis				See Weaving Analysis			
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,264	7	14.2	B	1,310	9	13.8	B	1,264	7	14.2	B	1,310	9	13.4	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	1,121	10	13.3	B	1,165	10	13.6	B	1,121	10	13.5	B	1,165	10	13.1	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	1,111	349	15.3	B	1,155	331	15.6	B	See Weaving Analysis				See Weaving Analysis			
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,460	38	15.7	B	1,486	29	16.1	B	See Weaving Analysis				See Weaving Analysis			
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,422	59	12.8	B	1,457	47	13.1	B	1,422	59	17.2	B	1,457	47	14.9	B
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,481	73	16.4	B	1,504	73	16.7	B	1,481	73	21.5	C	1,504	73	19.0	B
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,427	390	15.6	B	1,448	434	16.3	B	1,427	390	18.4	B	1,448	434	17.7	B
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	606	2.8	A	7,050	498	3.3	A	7,050	606	2.7	A	7,050	498	4.3	A
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	595	22.2	C	6,885	976	24.8	C	7,050	595	22.1	C	6,885	976	25.7	C

Indicates that the LOS exceeds the target level

The following table shows the mitigation measure needed to reduce the impacts of the WLC to a less-than-significant level. While this measure is feasible in the sense that, if it could be constructed it would achieve the target LOS, this does not necessarily mean that it passes other tests of feasibility. The physical and financial feasibility of mitigation measures and the means to fund them are discussed in greater depth in the Traffic Impact Analysis of the Revised Sections of the FEIR.

Table 4.15-34: Existing (2018) plus Project Freeway Ramps Levels of Service (Continued)

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Determination of Impact					Existing Plus Project & Mitigations								Mitigation Measures Required to Reduce Impact to Less-Than-Significant
				AM Peak Hour		PM Peak Hour			AM Peak Hour				PM Peak Hour				
				No-Project LOS	Plus Project LOS	No-Project LOS	Plus Project LOS	Project Impact?	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	F	F	F	F	Yes	9,134	266	27.2	C	8,384	1,016	26.3	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

4.15.6.3 Year 2025 With Phase 1 Conditions Traffic and Level of Service Impacts

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows: • Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C. • Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z. • Freeway mainline: LOS D. • Freeway Ramp Merge/Diverge: LOS D.

Intersection Analysis. Year 2025 with Phase 1 intersection levels of service for the study area intersections are summarized in Tables 4.15-35 and 4.15-36, which shows 26 study intersections would operate at unsatisfactory LOS in the 2025 with Phase 1 condition.

Phase 1 of the project would have a significant cumulative impact at the following 26 intersections under year 2025 with Phase 1 conditions:

Would Exceed Threshold of Significance Under Both the 2025 No-Project Scenario and the 2025 Plus Phase 1 Scenario

- IN-10 Redlands Blvd/Locust Ave. (AM, PM)
- IN-20 Oliver St/Alessandro Blvd. (AM, PM)
- IN-53 Lasselle St./Cactus Ave. (PM)
- IN-65 Perris Blvd./Cactus Ave. (AM)
- IN-66 Alessandro Blvd./Sycamore Canyon Blvd. (AM)
- IN-75 Central Ave./Lochmoor Dr. (AM)
- IN-76 Sycamore Canyon Blvd/Central Ave (PM)
- IN-80 Alessandro Blvd./Mission Grove Pkwy. (AM, PM)
- IN-83 Martin Luther King Blvd./Canyon Crest Dr. (AM)
- IN-85 Martin Luther King Blvd./I-215 NB Ramps (AM, PM)

- IN-86 Central Ave./Chicago Ave. (AM, PM)
- IN-88 Central Ave./Canyon Crest Dr. (PM)
- IN-94 Arlington Ave./Victoria Ave. (AM, PM)
- IN-95 Alessandro Blvd./Chicago Ave. (AM, PM)
- IN-98 Alessandro Blvd./Canyon Crest Dr. (PM)
- IN-107 Evans Rd./Rider St. (AM)
- IN-114 Evans Rd./Orange Ave. (AM)
- IN-123 Gilman Springs Rd./Bridge St. (AM, PM)
- IN-124 SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)
- IN-125 SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. (AM, PM)
- IN-131 Reche Canyon Rd./Reche Vista Rd. (AM)
- IN-132 San Timoteo Canyon Rd./Alessandro Rd. (AM, PM)
- IN-133 San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- IN-134 Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Would exceed the target LOS under the 2025 Plus Phase 1 Scenario, but not under the 2025 No Project Scenario:

- IN-27 Redlands Blvd./Cactus Ave. (PM)
- IN-123 Gilman Springs Rd./Bridge St. (PM)

Table 4.15-35: Year 2025 plus Phase 1 Intersection Levels of Service (A.M. Peak Hour)

ID	Study Intersection	LOS Standard	2025 No Project			2025 Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	5.8	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	10.8	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.0	A	RABT	7.1	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	11.3	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	6.2	A	SIGNAL	8.4	A
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	>180	**F**	CSS	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	28.5	C	SIGNAL	28.1	C
IN-12	Theodore St/Ironwood Ave	D	CSS	9.0	A	CSS	9.1	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	26.5	C	SIGNAL	27.8	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	10.3	B	SIGNAL	11.0	B
IN-15	Theodore St/SR-60 WB ramps	D	CSS	10.4	B	SIGNAL	14.6	B
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.7	A	SIGNAL	3.9	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	26.1	C	SIGNAL	28.2	C
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.5	A	SIGNAL	7.5	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	31.9	**D**	CSS	34.0	**D**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	15.6	B	SIGNAL	16.3	B
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	46.2	**E**	AWS	12.0	B
IN-24	Oliver St/Cactus Ave	D	SIGNAL	26.2	C	SIGNAL	27.2	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	17.1	B	SIGNAL	17.9	B
IN-26	Quincy St/Cactus Ave	C	SIGNAL	3.0	A	SIGNAL	2.9	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	15.1	C	AWS	23.1	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	24.7	C	SIGNAL	27.7	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	34.3	C	SIGNAL	33.1	C
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	30.7	C	SIGNAL	31.5	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	22.2	C	SIGNAL	22.6	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	25.8	C	SIGNAL	25.6	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	17.2	B	SIGNAL	18.1	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	18.5	B	SIGNAL	18.6	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	9.0	A	CSS	9.0	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	37.6	D	SIGNAL	34.1	C
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	16.6	B	SIGNAL	16.6	B
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	34.8	C	SIGNAL	40.2	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	44.3	D	SIGNAL	55.0	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	24.5	C	SIGNAL	24.3	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	39.6	D	SIGNAL	43.8	D
IN-42	Nason St/Iris Ave	C	SIGNAL	18.0	B	SIGNAL	18.7	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	28.6	C	SIGNAL	29.8	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	12.3	B	SIGNAL	12.3	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	37.0	D	SIGNAL	47.2	D
IN-46	Kitching St/Krameria Ave	D	SIGNAL	21.0	C	SIGNAL	20.4	C
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	23.9	C	SIGNAL	23.7	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	26.2	C	SIGNAL	25.8	C
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	22.1	C	SIGNAL	21.4	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	9.0	A	SIGNAL	8.9	A

Table 4.15-35: Year 2025 plus Phase 1 Intersection Levels of Service (A.M. Peak Hour) (Continued)

ID	Study Intersection	LOS Standard	2025 No Project			2025 Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	25.2	C	SIGNAL	25.0	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	28.7	C	SIGNAL	28.8	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	30.3	C	SIGNAL	29.5	C
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	34.8	C	SIGNAL	35.4	D
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	27.9	C	SIGNAL	27.2	C
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	26.0	C	SIGNAL	25.3	C
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	30.1	C	SIGNAL	29.9	C
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	23.2	C	SIGNAL	22.9	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	38.6	D	SIGNAL	38.1	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	11.5	B	SIGNAL	11.8	B
IN-62	Graham St/Cactus Ave	D	SIGNAL	22.3	C	SIGNAL	22.0	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	52.4	D	SIGNAL	50.5	D
IN-64	Indian St/Cactus Ave	C	SIGNAL	30.5	C	SIGNAL	29.8	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	79.0	**E**	SIGNAL	73.9	**E**
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	61.2	**E**	SIGNAL	56.6	**E**
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	5.4	A	SIGNAL	7.6	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	29.0	C	SIGNAL	24.1	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	32.6	C	SIGNAL	30.7	C
IN-70	Day St/Alessandro Blvd	D	SIGNAL	15.7	B	SIGNAL	15.7	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	20.6	C	SIGNAL	20.4	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	4.4	A	SIGNAL	5.0	A
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	46.7	D	SIGNAL	38.7	D
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	27.9	C	SIGNAL	26.5	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	72.9	**E**	SIGNAL	61.0	**E**
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	63.6	**E**	SIGNAL	35.3	D
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	9.1	A	SIGNAL	13.1	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	24.0	C	SIGNAL	14.3	B
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	37.7	D	SIGNAL	33.0	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	72.1	**E**	SIGNAL	72.8	**E**
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	32.8	C	SIGNAL	33.7	C
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	23.9	C	SIGNAL	25.1	C
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	107.5	**F**	SIGNAL	107.4	**F**
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	23.5	C	SIGNAL	23.1	C
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	45.2	**E**	AWS	46.8	**E**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	>180	**F**	SIGNAL	158.1	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	25.2	C	SIGNAL	24.2	C
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	44.6	D	SIGNAL	42.2	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	9.3	A	SIGNAL	9.4	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	26.1	C	SIGNAL	26.4	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	13.0	B	SIGNAL	14.8	B
IN-92	Arlington Ave/Maude St	D	SIGNAL	34.5	C	SIGNAL	46.4	D
IN-93	Horace St/Arlington Ave	D	SIGNAL	24.3	C	SIGNAL	22.1	C
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	175.9	**F**	SIGNAL	166.0	**F**

Table 4.15-36: Year 2025 plus Phase 1 Intersection Levels of Service (P.M. Peak Hour)

ID	Study Intersection	LOS Standard	2025 No Project			2025 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	World Logistics Center Pkwy/Street F	D	N/A	Non-Existent		RABT	5.5	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	11.3	B
IN-3	World Logistics Center Pkwy/Alessandro St	D	CSS	10.3	B	RABT	6.4	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	11.0	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	9.5	A	SIGNAL	9.7	A
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	>180	**F**	CSS	>180	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	25.0	C	SIGNAL	26.5	C
IN-12	Theodore St/Ironwood Ave	D	CSS	8.8	A	CSS	9.0	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	23.2	C	SIGNAL	21.6	C
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	19.1	B	SIGNAL	19.1	B
IN-15	Theodore St/SR-60 WB ramps	D	CSS	9.3	A	SIGNAL	15.3	B
IN-16	Theodore St/SR-60 EB ramps	D	CSS	9.5	A	SIGNAL	2.5	A
IN-18	Redlands Blvd/Eucalyptus Ave	D	SIGNAL	25.1	C	SIGNAL	24.2	C
IN-19	World Logistics Center Pkwy/Eucalyptus Ave	D	CSS	9.5	A	SIGNAL	8.7	A
IN-20	Oliver St/Alessandro Blvd	C	CSS	27.0	**D**	CSS	31.0	**D**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	17.8	B	SIGNAL	29.9	C
IN-22	Quincy St/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	36.2	**E**	AWS	14.5	B
IN-24	Oliver St/Cactus Ave	D	SIGNAL	19.7	B	SIGNAL	19.5	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	17.5	B	SIGNAL	18.9	B
IN-26	Quincy St/Cactus Ave	C	SIGNAL	3.2	A	SIGNAL	3.1	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	14.2	B	AWS	36.4	**E**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	24.7	C	SIGNAL	24.5	C
IN-29	Heacock St/Ironwood Ave	D	SIGNAL	47.3	D	SIGNAL	47.5	D
IN-30	Heacock St/SR-60 WB Ramps	D	SIGNAL	21.2	C	SIGNAL	21.0	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	23.3	C	SIGNAL	23.6	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	42.4	D	SIGNAL	43.2	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	19.1	B	SIGNAL	19.2	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	19.0	B	SIGNAL	18.7	B
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	8.6	A
IN-36	Moreno Beach Dr/Ironwood Ave	D	SIGNAL	20.9	C	SIGNAL	21.0	C
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	25.2	C	SIGNAL	27.1	C
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	50.4	D	SIGNAL	50.3	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	42.3	D	SIGNAL	38.1	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	22.9	C	SIGNAL	23.2	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	58.7	**E**	SIGNAL	52.9	D
IN-42	Nason St/Iris Ave	C	SIGNAL	19.4	B	SIGNAL	19.5	B
IN-43	Oliver St/Iris Ave	D	SIGNAL	25.7	C	SIGNAL	26.2	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	11.8	B	SIGNAL	11.8	B
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	35.9	D	SIGNAL	37.0	D
IN-46	Kitching St/Krameria Ave	D	SIGNAL	18.7	B	SIGNAL	19.1	B
IN-47	Lasselle St/Krameria Ave	D	SIGNAL	24.2	C	SIGNAL	22.7	C
IN-48	Kitching St/Alessandro Blvd	D	SIGNAL	24.8	C	SIGNAL	24.7	C
IN-49	Lasselle St/Alessandro Blvd	D	SIGNAL	22.3	C	SIGNAL	22.1	C
IN-50	Morrison St/Alessandro Blvd	D	SIGNAL	6.6	A	SIGNAL	6.7	A

Table 4.15-36: Year 2025 plus Phase 1 Intersection Levels of Service (P.M. Peak Hour) (Continued)

ID	Study Intersection	LOS Standard	2025 No Project			2025 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	23.0	C	SIGNAL	23.1	C
IN-52	Kitching St/Cactus Ave	C	SIGNAL	24.2	C	SIGNAL	24.4	C
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	36.9	**D**	SIGNAL	36.8	**D**
IN-54	Morrison St/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason St/Cactus Ave	D	SIGNAL	32.9	C	SIGNAL	32.9	C
IN-56	Frederick St/Alessandro Blvd	D	SIGNAL	42.2	D	SIGNAL	40.3	D
IN-57	Graham St/Alessandro Blvd	D	SIGNAL	49.7	D	SIGNAL	45.7	D
IN-58	Heacock St/Alessandro Blvd	D	SIGNAL	34.5	C	SIGNAL	34.9	C
IN-59	Indian St/Alessandro Blvd	D	SIGNAL	32.0	C	SIGNAL	30.4	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	40.4	D	SIGNAL	40.8	D
IN-61	Frederick St/Cactus Ave	D	SIGNAL	10.2	B	SIGNAL	10.1	B
IN-62	Graham St/Cactus Ave	D	SIGNAL	23.6	C	SIGNAL	23.4	C
IN-63	Heacock St/Cactus Ave	D	SIGNAL	52.3	D	SIGNAL	51.3	D
IN-64	Indian St/Cactus Ave	C	SIGNAL	30.9	C	SIGNAL	28.2	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	42.0	D	SIGNAL	39.8	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	42.0	D	SIGNAL	44.0	D
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	10.3	B	SIGNAL	11.7	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	15.6	B	SIGNAL	18.8	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	22.7	C	SIGNAL	21.8	C
IN-70	Day St/Alessandro Blvd	D	SIGNAL	15.0	B	SIGNAL	15.0	B
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	22.1	C	SIGNAL	21.4	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	24.8	C	SIGNAL	21.3	C
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	13.2	B	SIGNAL	10.9	B
IN-74	Elsworth St/Cactus Ave	D	SIGNAL	34.7	C	SIGNAL	36.0	D
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	72.3	**E**	SIGNAL	49.1	D
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	83.8	**F**	SIGNAL	55.5	**E**
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	23.5	C	SIGNAL	25.9	C
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	9.1	A	SIGNAL	9.9	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	22.7	C	SIGNAL	24.1	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	56.9	**E**	SIGNAL	55.2	**E**
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	54.3	D	SIGNAL	51.4	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	13.7	B	SIGNAL	13.0	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	57.3	**E**	SIGNAL	51.0	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	7.9	A	SIGNAL	8.0	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	>180	**F**	AWS	>180	**F**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	>180	**F**	SIGNAL	>180	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	33.6	C	SIGNAL	22.2	C
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	88.1	**F**	SIGNAL	71.0	**E**
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	9.9	A	SIGNAL	9.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	42.6	D	SIGNAL	45.7	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	27.7	C	SIGNAL	24.5	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	53.5	D	SIGNAL	36.8	D
IN-93	Horace St/Arlington Ave	D	SIGNAL	11.5	B	SIGNAL	11.0	B
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	>180	**F**	SIGNAL	179.3	**F**

Table 4.15-36: Year 2025 plus Phase 1 Intersection Levels of Service (P.M. Peak Hour) (Continued)

ID	Study Intersection	LOS Standard	2025 No Project			2025 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	151.6	**F**	SIGNAL	158.4	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	19.8	B	SIGNAL	18.8	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	114.3	**F**	SIGNAL	54.8	D
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	85.6	**F**	SIGNAL	54.8	**D**
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	37.5	D	SIGNAL	40.2	D
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	62.8	E	SIGNAL	71.3	E
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	27.2	C	SIGNAL	27.2	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	68.1	E	SIGNAL	56.2	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	15.5	B	SIGNAL	12.8	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	24.7	C	SIGNAL	24.5	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	18.4	B	SIGNAL	18.5	B
IN-107	Evans Rd/Rider St	C	SIGNAL	30.2	C	SIGNAL	30.3	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	35.2	D	SIGNAL	38.6	D
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	>180	**F**	AWS	>180	**F**
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	30.4	C	SIGNAL	28.0	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		N/A	Non-Existent	
IN-123	Gilman Springs Rd/Bridge St	C	CSS	>180	**F**	CSS	>180	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	>180	**F**	CSS	>180	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	>180	**F**	CSS	>180	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	97.4	**F**	SIGNAL	53.9	D
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	SIGNAL	37.1	**D**	SIGNAL	37.4	**D**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	20.2	C	SIGNAL	21.1	C
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	21.3	C	SIGNAL	21.0	C
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	171.9	**F**	AWS	175.8	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	>180	**F**	AWS	>180	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	>180	**F**	AWS	>180	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	20.3	C	CSS	20.0	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	11.1	B	AWS	10.9	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Roadway Analysis. Table 4.15-37compares the average daily traffic (ADT) volumes for study roadway segments for the 2025 No-Project Scenario and to their threshold of significance under the City's General Plan policies. The Project would have no impacts on roadway segments provided that the improvements in the RTP are implemented.

Table 4.15-37: 2025 Plus Phase 1 Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	2025 No-Project Conditions			2025 Plus Phase 1 Conditions			Project Impact Significant?
					Roadway Section**	Daily Volume	LOS	Roadway Section**	Daily Volume	LOS	
S-1	Theodore St	SR-60 WB Ramps	Ironwood Ave	D	4U	1,174	A	4U	2,267	A	
S-2	World Logistics Center Pkwy (A)	SR-60 EB Ramps	Eucalyptus Ave	D	2U	2,246	A	6D	24,242	A	
S-3	Eucalyptus Ave	Redlands Blvd	World Logistics Center Pkwy (A)	D	2U***	906	A	4D	1,668	A	
S-4	Eucalyptus Ave (Street B)	World Logistics Center Pkwy (A)	Gilman Springs Rd	N/A	Future Road			Future Road			
S-5	World Logistics Center Pkwy (A)	Eucalyptus Ave	Street E/Street F	D	2U	1,120	A	6D	22,164	A	
S-6	Street E	World Logistics Center Pkwy (A)	Cactus Ave Extension	N/A	Future Road			4U	3,342	A	
S-7	Street F	World Logistics Center Pkwy (A)	Alessandro Blvd (Street C)	N/A	Future Road			2U	1,164	A	
S-8	World Logistics Center Pkwy (A)	Street E/Street F	Alessandro Blvd (Street C)	D	2U	1,120	A	4D	10,947	A	
S-9	Alessandro Blvd (Street E)	Merwin Street	World Logistics Center Pkwy (A)	D	2U	3,524	A	4U	6,214	A	
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave	N/A	Future Road			4U	9,706	A	
S-11	Alessandro Blvd (Street C)	World Logistics Center Pkwy (A)	Street F	D	2U	2,801	A	4U	3,719	A	
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,801	A	4U	5,951	A	
S-14	Alessandro Blvd	Moreno Beach Dr	Redlands Blvd	D	4U	5,484	A	4U	6,690	A	****
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	D	6D	22,365	C	6D	23,267	C	
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	6D	20,260	C	6D	18,028	C	
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	D	4U	16,194	B	4U	15,793	B	
S-19	Redlands Blvd	Eucalyptus Ave	Alessandro Blvd	C	4U	11,586	A	4U	10,950	A	
S-20	Alessandro Blvd	Redlands Blvd	Merwin St	C	2U	5,885	A	2U	350	A	
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave	C	4U	10,282	A	4U	8,351	A	
S-22	Cactus Ave	Redlands Blvd	Cactus Ave Extension	C	2U***	990	A	4U	8,819	A	

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

**** Due to the severing of Alessandro Blvd. and the diversion of traffic to other routes, there would be no need to widen this section beyond the current 2U configuration

Indicates LOS exceeds the target level

Freeway Segment Analysis. Year 2025 with Phase 1 freeway segment levels of service for the study area are summarized in Table 4.15-38, which shows 34 freeway segments would operate at unsatisfactory levels of service in the year 2025 with Phase 1 condition.

Northbound or Eastbound Sections:

- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Central Ave. to Mountain Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pierce St. to Magnolia Ave.
- SR-91 from Adams St. to Madison St.
- SR-91 from Central Ave. to 14th St.
- I-215 from Eucalyptus Ave. to SR-60
- I-215 from Barton Rd. to Mt. Vernon Ave.
- I-215 from Auto Plaza Dr. to Mill St.

Southbound or Westbound

- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-60 from I-15 to McKinley St.
- SR-91 from McKinley St. to Pierce St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Tyler St. to Van Buren Blvd.
- SR-91 from Van Buren Blvd. to Adams St.
- SR-91 from Adams St. to Madison St.
- SR-91 from Madison St. to Arlington Ave.
- I-215 from Center St. to La Cadena Dr.
- I-215 from La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

Table 4.15-38: 2025 Plus Phase 1 Freeway Mainline Level of Service

ID	Freeway	Segment	2025 No-Project Conditions						2025 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,520	29.7	D	6,580	28.2	D	6640	30.5	D	6,530	28.1	D
F-3	SR-60	Ramona Ave to Central Ave	8,600	43.5	**E**	9,500	48.5	**F**	8,730	45.5	**F**	9,460	48.5	**F**
F-4	SR-60	Central Ave to Mountain Ave	7,710	35.2	**E**	8,390	37.3	**E**	7,850	36.6	**E**	8,350	37.3	**E**
F-5	SR-60	Mountain Ave to Euclid Ave	8,040	38.0	**E**	8,390	37.3	**E**	8,190	39.7	**E**	8,340	37.2	**E**
F-6	SR-60	Euclid Ave to Grove Ave	7,960	37.3	**E**	8,560	38.7	**E**	8,110	39.0	**E**	8,500	38.6	**E**
F-7	SR-60	Grove Ave to Vineyard Ave	7,320	32.2	D	9,460	48.0	**F**	7,480	33.7	D	9,390	47.7	**F**
F-8	SR-60	Vineyard Ave to Archibald Ave	7,210	31.2	D	9,610	49.9	**F**	7,360	32.5	D	9,530	49.5	**F**
F-9	SR-60	Archibald Ave to Haven Ave	7,290	32.0	D	6,980	27.8	D	7,440	33.1	D	6,900	27.5	D
F-10	SR-60	Haven Ave to Milliken Ave	8,240	28.2	D	7,640	23.5	C	8,390	28.9	D	7,520	23.2	C
F-11	SR-60	Milliken Ave to I-15	4,670	18.6	C	5,430	20.5	C	4,820	19.3	C	5,310	20.1	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,210	16.7	B	4,820	18.0	B	4,430	17.6	B	4,700	17.7	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	3,640	14.4	B	3,970	14.9	B	3,830	15.3	B	3,810	14.3	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	3,120	12.6	B	3,430	13.1	B	3,370	13.7	B	3,340	12.9	B
F-15	SR-60	Pedley Rd to Pyrite St	3,290	13.2	B	3,760	14.3	B	3,520	14.2	B	3,670	14.1	B
F-16	SR-60	Pyrite St to Valley Way	3,940	15.8	B	4,170	15.8	B	4,240	17.0	B	4,060	15.5	B
F-17	SR-60	Valley Way to Rubidoux Blvd	5,110	29.1	D	5,840	32.7	D	5,400	31.9	D	5,700	32.0	D
F-18	SR-60	Rubidoux Blvd to Market St	5,320	30.9	D	6,110	35.6	**E**	5,450	32.4	D	5,970	34.5	D
F-19	SR-60	Market St to Main St	5,780	35.5	**E**	6,910	45.6	**F**	5,890	36.7	**E**	6,870	45.5	**F**
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,930	74.8	**F**	10,270	66.4	**F**	10,310	87.7	**F**	10,130	66.5	**F**
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	5,300	21.0	C	6,590	25.5	C	5,540	22.2	C	6,340	24.6	C
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,020	25.3	C	5,100	59.6	**F**	3,140	27.4	D	4,980	58.0	**F**
F-30	SR-60	Heacock St to Perris Blvd	2,770	22.5	C	3,740	30.5	D	3,010	25.5	C	3,690	30.8	D
F-31	SR-60	Perris Blvd to Nason St	2,530	20.2	C	3,410	26.7	D	2,790	23.2	C	3,400	27.3	D
F-32	SR-60	Nason St to Moreno Beach Dr	2,270	12.1	B	3,140	15.5	B	2,490	13.6	B	3,120	15.8	B
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	2,120	11.3	B	2,910	14.4	B	2,380	13.1	B	2,900	14.8	B
F-34	SR-60	Redlands Blvd to Theodore St	1,800	9.6	A	2,790	13.8	B	2,320	12.8	B	2,880	14.7	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,930	7.7	A	3,050	11.3	B	See Weaving Analysis			See Weaving Analysis		
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,380	8.0	A	2,220	11.5	B	1,330	7.7	A	2,150	11.5	B
F-37	SR-60	Jack Rabbit Trail to Potero Blvd	1,500	12.1	B	2,270	16.8	B	1,440	11.6	B	2,230	16.7	B
F-38	SR-60	Potero Blvd to I-10	1,420	11.5	B	1,340	10.0	A	1,360	11.0	A	1,400	10.6	A
F-39	SR-91	I-15 to McKinley St	4,670	17.5	B	6,840	28.9	D	4,790	18.0	C	6,730	28.2	D
F-40	SR-91	McKinley St to Pierce St	5,230	27.9	D	5,840	35.5	**E**	5,350	28.9	D	5,720	34.2	D
F-41	SR-91	Pierce St to Magnolia Ave	6,760	44.9	**E**	7,590	68.9	**F**	6,880	46.8	**F**	7,490	65.8	**F**
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	7,390	30.6	D	7,530	33.8	D	7,460	31.3	D	7,450	33.5	D
F-44	SR-91	Tyler St to Van Buren Blvd	7,410	30.5	D	8,330	40.3	**E**	7,480	31.0	D	8,320	40.2	**E**
F-45	SR-91	Van Buren Blvd to Adam St	4,950	18.6	C	5,280	20.8	C	5,010	18.9	C	5,280	20.8	C
F-46	SR-91	Adam St to Madison St	7,670	63.0	**F**	8,550	120.9	**F**	7,720	64.3	**F**	8,560	121.9	**F**

Table 4.15-38: 2025 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2025 No-Project Conditions						2025 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,840	34.2	D	5,710	23.1	C	7,870	34.5	D	5,730	23.2	C
F-49	SR-91	Central Ave to 14th St	7,300	56.6	**F**	6,200	40.8	**E**	7,310	57.6	**F**	6,200	40.8	**E**
F-50	SR-91	14th St to University Ave	4,820	18.0	B	4,600	17.9	B	4,770	18.0	B	4,630	18.0	C
F-51	SR-91	University Ave to Spruce St	6,140	18.5	C	5,880	18.5	C	6,090	18.5	C	5,920	18.7	C
F-66	I-215	Scott Rd to Newport Rd	3,430	13.5	B	4,650	17.4	B	3,410	13.5	B	4,610	17.3	B
F-67	I-215	Gambroni Rd to Newport Rd	3,150	12.4	B	4,140	15.5	B	3,120	12.3	B	4,110	15.4	B
F-68	I-215	Newport Rd to McCall Blvd	2,500	9.9	A	3,040	11.4	B	2,450	9.7	A	3,030	11.3	B
F-69	I-215	McCall Blvd to Ethanac Rd	3,110	12.3	B	4,290	16.1	B	3,040	12.0	B	4,280	16.0	B
F-70	I-215	Ethanac Rd to SR-74	4,230	16.7	B	4,070	15.2	B	4,130	16.4	B	4,050	15.2	B
F-71	I-215	SR-74 to Redlands Ave	3,600	14.4	B	4,910	18.6	C	3,490	14.0	B	4,900	18.6	C
F-86	I-215	Redlands Blvd to D St	4,810	19.0	C	4,010	15.1	B	4,760	18.8	C	4,010	15.1	B
F-87	I-215	D St to Nuevo St/Harvil Ave	4,100	12.9	B	5,590	16.8	B	4,040	12.8	B	5,570	16.8	B
F-88	I-215	Nuevo St to Mid-County Pkwy	4,110	13.1	B	4,960	15.0	B	4,020	12.8	B	4,930	14.9	B
F-89	I-215	Mid-Count Pkwy to Ramona Expy	4,970	15.8	B	5,850	17.7	B	4,860	15.4	B	5,850	17.7	B
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox	4,440	14.2	B	5,920	17.9	B	4,370	13.9	B	5,900	17.8	B
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	4,570	25.2	C	4,230	22.0	C	4,470	24.5	C	4,340	22.7	C
F-92	I-215	Van Buren Blvd to Cactus Ave	4,860	19.4	C	4,320	16.3	B	4,840	19.4	C	4,420	16.7	B
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,470	24.6	C	5,380	29.5	D	4,430	24.4	C	5,530	30.8	D
F-95	I-215	Eucalyptus Ave to SR-60	4,730	26.5	D	5,960	34.7	D	4,720	26.4	D	6,170	37.0	**E**
F-74	I-215	Columbia Ave to Center St	6,970	30.6	D	7,380	30.6	D	6,950	30.5	D	7,410	30.8	D
F-75	I-215	Center St to La Cadena Dr	5,390	31.9	D	5,620	31.1	D	5,380	31.8	D	5,660	31.4	D
F-76	I-215	La Cadena Dr to Barton Rd	5,470	32.4	D	5,400	29.2	D	5,450	32.2	D	5,460	29.7	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,930	37.9	**E**	6,150	36.7	**E**	5,910	37.6	**E**	6,220	37.9	**E**
F-78	I-215	Mt. Vernon Ave to I-10	6,380	27.5	D	6,370	25.2	C	6,330	27.2	D	6,460	25.7	C
F-80	I-215	Auto Plaza Dr to Mill St	5,470	22.0	C	9,900	54.7	**F**	5,420	21.7	C	9,970	55.8	**F**
F-83	I-215	Baseline Rd to Highland Ave	3,230	12.8	B	5,020	18.8	C	3,200	12.7	B	5,050	19.0	C
F-52	I-10	SR-60 to Beaumont Ave	4,100	16.1	B	5,400	21.1	C	4,060	15.9	B	5,330	20.9	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,210	16.8	B	5,850	23.6	C	4,180	16.6	B	5,800	23.3	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,400	17.4	B	6,080	24.7	C	4,370	17.4	B	6,040	24.5	C
F-55	I-10	Highland Springs Ave to Sunset Ave	4,320	17.2	B	5,930	24.0	C	4,270	17.0	B	5,900	23.8	C
F-56	I-10	Sunset Ave to 22nd St	4,220	13.4	B	5,700	17.9	B	4,170	13.3	B	5,690	17.8	B
F-57	I-10	22nd St to 8th St	4,120	16.4	B	5,560	22.2	C	4,070	16.2	B	5,550	22.1	C
F-58	I-10	8th St to Hargrave St	4,110	16.4	B	5,490	21.9	C	4,050	16.1	B	5,490	21.9	C
F-59	I-10	Hargrave St to Fields Rd	3,790	15.1	B	4,970	19.7	C	3,720	14.9	B	4,980	19.7	C
F-60	I-10	Fields Rd to Morongo Trail	3,630	14.5	B	4,740	18.7	C	3,560	14.2	B	4,760	18.8	C
F-61	I-10	Morongo Trail to Main St	3,260	12.9	B	4,250	16.5	B	3,190	12.6	B	4,270	16.7	B
F-62	I-10	Main St to Haugen-Lehmann Way	3,290	12.9	B	4,260	16.5	B	3,220	12.6	B	4,280	16.6	B
F-64	I-10	SR-111 to Tipton Rd	2,870	11.3	B	3,710	14.4	B	2,740	10.8	A	3,740	14.5	B
F-65	I-10	Tipton Rd to SR-62	2,740	10.8	A	3,740	14.5	B	2,690	10.6	A	3,770	14.6	B

Indicates that the LOS exceeds the target level

Table 4.15-38: 2025 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2025 No-Project Conditions						2025 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,840	34.2	D	5,710	23.1	C	7,870	34.5	D	5,730	23.2	C
F-49	SR-91	Central Ave to 14th St	7,300	56.6	**F**	6,200	40.8	**E**	7,310	57.6	**F**	6,200	40.8	**E**
F-50	SR-91	14th St to University Ave	4,820	18.0	B	4,600	17.9	B	4,770	18.0	B	4,630	18.0	C
F-51	SR-91	University Ave to Spruce St	6,140	18.5	C	5,880	18.5	C	6,090	18.5	C	5,920	18.7	C
F-66	I-215	Scott Rd to Newport Rd	3,430	13.5	B	4,650	17.4	B	3,410	13.5	B	4,610	17.3	B
F-67	I-215	Gambroni Rd to Newport Rd	3,150	12.4	B	4,140	15.5	B	3,120	12.3	B	4,110	15.4	B
F-68	I-215	Newport Rd to McCall Blvd	2,500	9.9	A	3,040	11.4	B	2,450	9.7	A	3,030	11.3	B
F-69	I-215	McCall Blvd to Ethanac Rd	3,110	12.3	B	4,290	16.1	B	3,040	12.0	B	4,280	16.0	B
F-70	I-215	Ethanac Rd to SR-74	4,230	16.7	B	4,070	15.2	B	4,130	16.4	B	4,050	15.2	B
F-71	I-215	SR-74 to Redlands Ave	3,600	14.4	B	4,910	18.6	C	3,490	14.0	B	4,900	18.6	C
F-86	I-215	Redlands Blvd to D St	4,810	19.0	C	4,010	15.1	B	4,760	18.8	C	4,010	15.1	B
F-87	I-215	D St to Nuevo St/Harvil Ave	4,100	12.9	B	5,590	16.8	B	4,040	12.8	B	5,570	16.8	B
F-88	I-215	Nuevo St to Mid-County Pkwy	4,110	13.1	B	4,960	15.0	B	4,020	12.8	B	4,930	14.9	B
F-89	I-215	Mid-Count Pkwy to Ramona Expy	4,970	15.8	B	5,850	17.7	B	4,860	15.4	B	5,850	17.7	B
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox	4,440	14.2	B	5,920	17.9	B	4,370	13.9	B	5,900	17.8	B
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	4,570	25.2	C	4,230	22.0	C	4,470	24.5	C	4,340	22.7	C
F-92	I-215	Van Buren Blvd to Cactus Ave	4,860	19.4	C	4,320	16.3	B	4,840	19.4	C	4,420	16.7	B
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	4,470	24.6	C	5,380	29.5	D	4,430	24.4	C	5,530	30.8	D
F-95	I-215	Eucalyptus Ave to SR-60	4,730	26.5	D	5,960	34.7	D	4,720	26.4	D	6,170	37.0	**E**
F-74	I-215	Columbia Ave to Center St	6,970	30.6	D	7,380	30.6	D	6,950	30.5	D	7,410	30.8	D
F-75	I-215	Center St to La Cadena Dr	5,390	31.9	D	5,620	31.1	D	5,380	31.8	D	5,660	31.4	D
F-76	I-215	La Cadena Dr to Barton Rd	5,470	32.4	D	5,400	29.2	D	5,450	32.2	D	5,460	29.7	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,930	37.9	**E**	6,150	36.7	**E**	5,910	37.6	**E**	6,220	37.9	**E**
F-78	I-215	Mt. Vernon Ave to I-10	6,380	27.5	D	6,370	25.2	C	6,330	27.2	D	6,460	25.7	C
F-80	I-215	Auto Plaza Dr to Mill St	5,470	22.0	C	9,900	54.7	**F**	5,420	21.7	C	9,970	55.8	**F**
F-83	I-215	Baseline Rd to Highland Ave	3,230	12.8	B	5,020	18.8	C	3,200	12.7	B	5,050	19.0	C
F-52	I-10	SR-60 to Beaumont Ave	4,100	16.1	B	5,400	21.1	C	4,060	15.9	B	5,330	20.9	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,210	16.8	B	5,850	23.6	C	4,180	16.6	B	5,800	23.3	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,400	17.4	B	6,080	24.7	C	4,370	17.4	B	6,040	24.5	C
F-55	I-10	Highland Springs Ave to Sunset Ave	4,320	17.2	B	5,930	24.0	C	4,270	17.0	B	5,900	23.8	C
F-56	I-10	Sunset Ave to 22nd St	4,220	13.4	B	5,700	17.9	B	4,170	13.3	B	5,690	17.8	B
F-57	I-10	22nd St to 8th St	4,120	16.4	B	5,560	22.2	C	4,070	16.2	B	5,550	22.1	C
F-58	I-10	8th St to Hargrave St	4,110	16.4	B	5,490	21.9	C	4,050	16.1	B	5,490	21.9	C
F-59	I-10	Hargrave St to Fields Rd	3,790	15.1	B	4,970	19.7	C	3,720	14.9	B	4,980	19.7	C
F-60	I-10	Fields Rd to Morongo Trail	3,630	14.5	B	4,740	18.7	C	3,560	14.2	B	4,760	18.8	C
F-61	I-10	Morongo Trail to Main St	3,260	12.9	B	4,250	16.5	B	3,190	12.6	B	4,270	16.7	B
F-62	I-10	Main St to Haugen-Lehmann Way	3,290	12.9	B	4,260	16.5	B	3,220	12.6	B	4,280	16.6	B
F-64	I-10	SR-111 to Tipton Rd	2,870	11.3	B	3,710	14.4	B	2,740	10.8	A	3,740	14.5	B
F-65	I-10	Tipton Rd to SR-62	2,740	10.8	A	3,740	14.5	B	2,690	10.6	A	3,770	14.6	B

Indicates that the LOS exceeds the target level

Table 4.15-38: 2025 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2025 No-Project Conditions						2025 Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-47	SR-91	Madison St to Arlington Ave	7,440	55.8	**F**	7,240	56.6	**F**	7,440	55.8	**F**	7,240	57.4	**F**
F-49	SR-91	Central Ave to 14th St	5,650	21.6	C	7,260	31.3	D	5,680	21.7	C	7,260	31.6	D
F-50	SR-91	14th St to University Ave	5,650	21.6	C	7,260	31.3	D	5,680	21.7	C	7,260	31.6	D
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	3,030	11.3	B	2,500	9.3	A	1,420	5.5	A	1,320	5.0	A
F-67	I-215	Gambroni Rd to Newport Rd	2,990	11.2	B	2,930	10.9	A	3,010	11.3	B	2,450	9.1	A
F-68	I-215	Newport Rd to McCall Blvd	3,170	11.9	B	3,680	13.6	B	3,180	12.0	B	3,630	13.5	B
F-69	I-215	McCall Blvd to Ethanac Rd	3,170	11.9	B	3,680	13.6	B	3,180	12.0	B	3,630	13.5	B
F-70	I-215	Ethanac Rd to SR-74	3,700	13.9	B	4,350	16.1	B	3,700	13.9	B	4,250	15.8	B
F-71	I-215	SR-74 to Redlands Ave	5,200	19.8	C	5,000	18.7	C	5,210	19.8	C	4,900	18.3	C
F-86	I-215	Redlands Blvd to D St	3,160	11.9	B	2,640	9.8	A	3,170	12.0	B	2,630	9.8	A
F-87	I-215	D St to Nuevo St/Harvil Ave	4,020	12.1	B	3,250	9.7	A	4,040	12.2	B	3,250	9.7	A
F-88	I-215	Nuevo St to Mid-County Pkwy	4,430	13.4	B	4,080	12.3	B	4,430	13.5	B	4,120	12.4	B
F-89	I-215	Mid-Count Pkwy to Ramona Expy	4,830	14.6	B	5,980	17.8	B	4,870	14.7	B	6,010	17.9	B
F-90	I-215	Ramona Expy/Cajalco Expy to Harley Knox	2,790	8.5	A	5,460	16.3	B	2,840	8.6	A	5,420	16.1	B
F-91	I-215	Harley Knox Blvd to Van Buren Blvd	3,770	19.8	C	6,720	42.4	**E**	3,840	20.1	C	6,720	42.4	**E**
F-92	I-215	Van Buren Blvd to Cactus Ave	4,000	15.1	B	6,260	24.1	C	4,020	15.2	B	6,150	23.5	C
F-94	I-215	Alessandro Blvd to Eucalyptus Ave	5,410	29.5	D	5,950	34.0	D	5,470	30.2	D	5,800	32.6	D
F-95	I-215	Eucalyptus Ave to SR-60	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-74	I-215	Columbia Ave to Center St	7,630	33.2	D	7,220	29.4	D	7,650	33.4	D	7,230	29.4	D
F-75	I-215	Center St to La Cadena Dr	7,710	64.0	**F**	7,280	51.2	**F**	7,770	65.8	**F**	7,320	51.9	**F**
F-76	I-215	La Cadena Dr to Barton Rd	7,720	64.3	**F**	7,400	52.7	**F**	7,770	65.8	**F**	7,380	52.4	**F**
F-77	I-215	Barton Rd to Mt. Vernon Ave	6,570	41.4	**E**	7,460	53.9	**F**	6,620	42.0	**E**	7,430	53.3	**F**
F-78	I-215	Mt. Vernon Ave to I-10	6,350	25.1	C	5,840	22.3	C	6,410	25.4	C	5,810	22.1	C
F-80	I-215	Auto Plaza Dr to Mill St	6,460	25.4	C	6,020	22.8	C	6,520	25.7	C	6,010	22.8	C
F-83	I-215	Baseline Rd to Highland Ave	4,930	18.5	C	3,740	13.9	B	5,000	18.8	C	3,750	13.9	B
F-52	I-10	SR-60 to Beaumont Ave	5,750	25.3	C	5,190	19.6	C	5,710	25.3	C	5,160	19.5	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	5,880	26.4	D	5,330	20.4	C	5,840	26.2	D	5,300	20.3	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	6,330	29.3	D	5,480	21.1	C	6,290	29.0	D	5,440	20.9	C
F-55	I-10	Highland Springs Ave to Sunset Ave	5,810	26.0	D	5,150	19.8	C	5,800	26.0	C	5,100	19.6	C
F-56	I-10	Sunset Ave to 22nd St	5,580	19.1	C	5,060	15.5	B	5,590	19.1	C	5,020	15.3	B
F-57	I-10	22nd St to 8th St	5,460	24.0	C	4,960	19.0	C	5,470	24.2	C	4,930	18.9	C
F-58	I-10	8th St to Hargrave St	5,390	23.6	C	4,980	19.1	C	5,400	23.8	C	4,930	18.9	C
F-59	I-10	Hargrave St to Fields Rd	4,830	20.9	C	4,660	17.8	B	4,860	21.1	C	4,600	17.6	B
F-60	I-10	Fields Rd to Morongo Trail	4,620	19.9	C	4,560	17.4	B	4,650	20.1	C	4,510	17.3	B
F-61	I-10	Morongo Trail to Main St	4,110	17.4	B	4,150	15.6	B	4,140	17.6	B	4,090	15.5	B
F-62	I-10	Main St to Haugen-Lehmann Way	4,100	17.4	B	4,200	15.8	B	4,130	17.5	B	4,140	15.6	B
F-64	I-10	SR-111 to Tipton Rd	3,570	15.2	B	3,570	13.4	B	3,600	15.3	B	3,540	13.3	B
F-65	I-10	Tipton Rd to SR-62	3,590	15.2	B	3,580	13.5	B	3,620	15.4	B	3,550	13.4	B

Indicates that the LOS exceeds the target level

4.15.6.5 Freeway Impacts from Truck Trips to the Ports of Los Angeles and Long Beach

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows: • Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C. • Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z. • Freeway mainline: LOS D. • Freeway Ramp Merge/Diverge: LOS D.

Several comments received on the Draft EIR indicated confusion regarding the volume of truck traffic between the WLC and the Ports of Los Angeles and Long Beach. In general, the DEIR commenters seemed to believe that the truck traffic between the WLC and the ports will be much higher than will actually occur. This section responds to these comments by 1) describing the current share of port-related use of warehouse space, 2) estimating the truck traffic between the WLC and the ports using three different methods, 3) estimating the growth in WLC truck traffic to the port over time, and 4) determining whether WLC trucks would impose significant impacts on the freeways to the ports beyond those identified in previous chapters.

Current Share of Port-Related Warehouse Space. The DEIR commenters referred to SCAG's study titled Industrial Space in Southern California: Future Supply and Demand for Warehousing and Intermodal Facilities. This study states that 13 percent of the occupied warehouse space in the SCAG region in 2009 was port-related. This indicates that while the ports are important sources of demand for warehouse space, the great majority of warehouse space serves other demands. In a large regional economy such as southern California this other demand amounted to 578 million square feet in 2009, and is growing over time.

The SCAG study also shows wide differentiation in the markets served. Riverside County serves only a small percentage of port-related demand while playing a much more important role in serving non-port demand. This differentiation reflects the tendency of warehouse tenants whose operations rely on the ports to self-select locations close to the port.

The information provided in the report indicates that only 5 percent of the warehouse space in Riverside County serves port-related demand, which suggests that the volume of truck traffic between the ports and warehouses in Riverside County, including those in WLC, will be relatively small.

The study also reached two conclusions regarding the regional supply of warehouse space, taken from the report's Executive Summary (pages ES-1 and ES-2):

> *"According to assumed growth rates, the region will run out of suitably zoned vacant land in about the year 2028. At that time, forecasts show that the demand for warehousing space will be approximately 1,023 million square feet.*
>
> *During the year 2035, there will be a projected shortfall of space of about 228 million square feet, unless other land not currently zoned for warehousing becomes available."*

In other words, according to the SCAG study cited by the commenters, even if all of the land currently zoned for warehouse space were developed, there would still be a massive shortfall of warehouse space by 2040 unless projects like the WLC are approved and built.

Estimating Truck Trips between WLC and the Ports. In order to ensure that a reasonable worst-case scenario was used for the impact analysis, the number of truck trips between the WLC and the ports was forecast using three different methods, all based on data provided by regional planning agencies, with the highest of the three forecasts used for the analysis. The three methods were as follows:

- *Method 1: RivTAM Model.* The first method for estimating truck trips to the port was to use the RivTAM model. As described in Chapter 2, RivTAM is the standard traffic forecasting tool used by agencies in Riverside County to analyze the regional effects of proposed projects. Like most other traffic models, RivTAM assigns trips to destinations using a gravity model where the number of trips between each origin/destination pair increases in proportion to the number of trips generated at each end, but decreases in proportion to the distance between the origin and destination. The effect of distance on the likelihood of travel between origin-destination pairs is determined by the trip length distribution which in turn is based on survey data.

  The WLC's proposed land uses were input into the RivTAM model as described in Chapter 2, the model was run, and the outputs were checked to find how many truck trips were assigned between the ports TAZs and the WLC. Using the RivTAM model to estimate truck trips yields 82 truck trips per day between the ports and the WLC if the WLC were built today (i.e., the 2018 Plus Full Build-Out scenario).

- *Method 2: Based on Port Truck Study.* The best information currently available on truck trips from the ports comes from the Ports of Los Angeles and Long Beach Year 2010 Marine Terminal Gate Surveys. These surveys found that 1.5 percent of truck trips entering the ports came from Riverside County and 1.7 percent of trucks leaving the ports went to Riverside County. These finding are consistent with an earlier study that found 1 percent of truck trips entering the ports came from Riverside County and 2 percent of truck trips leaving the ports went to Riverside County (the numbers are rounded in the study). Applying the percentages from the 2010 survey to the approximately 54,700 truck trips per day generated by the ports yields a total of approximately 800 trucks per day between the ports and Riverside County.

  If we make the conservative assumption that every one of these 875 truck trips goes to a warehouse rather than to a factory, store, or some other destination, and divide these trips among the 136 million square feet of occupied warehouse space in Riverside County, we find an average of 6.5truck trips to or from the ports per million square feet of warehouse space per day. Applying this rate to the 40.6 million square feet of warehouse space proposed for the WLC yields 261 truck trips per day between the ports and the WLC if the WLC were built today (the 2018 Plus Full Build-Out scenario).

- *Method 3: Based on Truck Flows from Riverside County.* The best information currently available on regional truck traffic patterns comes from SCAG's Goods Movement Study that was done in preparation for the 2016 RTP/SCS.

  Applying the ports' 0.8 percent share of Riverside County truck trips applies to WLC's 15,138 medium and heavy truck trips per day yields 125 truck trips per day between the ports and the WLC if the WLC were built today (the 2018 Plus Full Build-Out scenario).

  This analysis shows that a reasonable estimate of truck traffic between WLC and the ports would be in the range of 82 to 261 truck trips per day. The higher figure of 261 truck trips per day was used as a reasonable worst-case scenario.

Growth in Truck Trips to the Port. Some comments suggested that the analysis should consider the possibility that the share of warehouse space in the Inland Empire, and by extension the WLC, may grow over time. This section addresses those comments.

As discussed previously, currently only 0.8 percent of the truck trips in Riverside County are to or from the ports. In the future, port-related uses are anticipated to require a greater share of warehouse space. For Riverside County, SCAG estimates that the percentage of warehouse space devoted to port uses would more than triple between 2018 and 2035, from 6.6 percent to 16.3 percent.

The estimated percentage of WLC trucks going to the ports is 1.72% for the Year 2018 scenario, 2.54% for the Year 2025 scenario, 4.24% for the Year 2035 scenario and 5.09% for Year 2040 scenario. These estimates are based on 261 project truck trips per day to the port compared to 15,138 total medium and heavy truck trips to and from the WLC in the year 2018 scenario.

These percentages were then applied to the trip generation rates to obtain the number of WLC trucks to and from the port for each analysis period. The estimated quantity of WLC trucks going to the ports per day is 261 for the Year 2018 scenario, 222 for the Year 2025 scenario, and 770 for the Year 2040 scenario. Tests with the SCAG traffic model showed that these trips would split approximately evenly between SR-60 and SR-91 routes.

Determination of Whether Impacts are Significant. The potential for traffic impacts along the SR-60 and SR-91 corridors was assessed by manually adding the forecasts for WLC trucks to and from the port to the No-Project condition from the SCAG model. Because the ports and the freeways leading to them are in Los Angeles County, the threshold of significance for the analysis was taken from the Los Angeles County Congestion Management Program (CMP). The CMP states that a significant impact would be deemed to occur if the project increased demand on a highway by at least 2 percent causing LOS F or, if the highway facility already operates at LOS F, then a significant impact would be deemed to occur if the project increases traffic demand by 2 percent or more of capacity.

Analysis of the project's impacts to each section of the SR-60 and SR-91 corridors and in each direction, for both the a.m. and p.m. peak periods, was conducted for the 2018, 2025, and 2040 scenarios. The addition of the WLC traffic would increase freeway traffic volume ranging from 0.03 percent to 0.48 percent of non-project traffic, would not cause a significant impact on any segment of these freeways.

4.15.7 Mitigation of Significant Impacts

As described in detail in Section 4.15.4, the level of service performance standards used in this EIR are as follows:

- Roadway segments and intersections: LOS C, LOS D, or LOS E as outlined in previously referenced Tables 4.15.B, 4.15.C, and 4.15.D.
- Freeway mainline: LOS D (or existing density if currently operating at LOS E or F).
- Freeway Ramp Merge/Diverge: LOS D.

The methodology used to identify mitigation measures included:

1) Determining whether the LOS exceeded the target threshold in the Plus Project condition.
2) If so, then determining whether the appropriate measure of effectiveness under Plus Project conditions was below that under No Project conditions. Some study freeway segments were found to exceed the threshold of significance under Plus Project conditions but the traffic density was lower under Plus Project conditions than No Project conditions. This could happen because the project would cause some commuters to switch from the peak direction to the off-peak direction, thus reducing congestion at some locations. The project's impacts (both project direct and cumulative impacts) were considered significant only when the Plus Project condition was worse than the No-Project condition.
3) If the project had a significant impact, capacity-increasing improvements were then added incrementally until the LOS was within the target threshold of significance.
4) For cumulative impacts, determining whether the mitigations could be funded as part of an established fee program such as TUMF or DIF. If so, then payment into the TUMF or DIF program constitutes mitigation of impacts to the TUMF and DIF facilities.
5) For improvements that would not be funded from an established fee program the project's fair-share contribution was computed using the formula in Caltrans' *Guide for the Preparation of Traffic Impact Studies - Appendix "B"*. This formula defines the project's fair-share as the project-related traffic's percentage share of overall traffic growth, not including new traffic attributable to projects that have already been approved. Where there were significant impacts in both the a.m. and p.m. peak periods, the period with the higher share of project traffic was used to determine the fair-share contribution.

Potential mitigation measures were analyzed to determine whether they were feasible or not. Improvements were deemed to be infeasible if they would require the acquisition of existing homes or businesses, if they would result in excessive air, noise, or vibration impacts on existing homes, businesses, or sensitive natural environments, or would create safety impacts that could be considered less acceptable than a reduced traffic LOS. In cases where feasibility is uncertain, the recommended improvement was treated as feasible in order to produce a conservative estimate of project responsibilities (i.e. "conservative" in the sense that the project's responsibilities would not be under-estimated).

In cases where a proposed modification to an existing intersection would result in the elimination of an existing bus stop or bicycle lane the proposed mitigation would include the replacement of the bicycle lane or bus stop even if not explicitly stated. This is also true of the replacement of existing curbs, gutters, sidewalks, lights, and other existing design features.

Timing of Improvements. It is important to note that the specific timing of installation of the various identified improvements will occur as indicated by subsequent traffic studies when specific development is proposed in the future, as outlined in Mitigation Measure 4.15.7.4A. It is therefore not possible at this time, in this programmatic document, to identify the specific timing of roadway or other circulation improvements identified in this document.

4.15.7.1 The TUMF Program

In 1988, the voters of Riverside County approved Measure A, a half-cent sales tax to fund transportation projects. In 2002, voters approved a 20-year extension of Measure A, this time including a Transportation Uniform Mitigation Fee or TUMF. The rationale behind TUMF was that having a single uniform fee program to mitigate the cumulative regional impacts of new development on the area's arterial highway system would be more effective than having multiple and potentially uncoordinated fee programs with varying policies, fee amounts, and project lists. Under the TUMF, developers of residential, industrial, and commercial property pay a development fee to fund transportation projects that will be required as a result of the growth the projects create. The program is recognition by voters

that residents and employees in all of Western Riverside County's jurisdictions benefit from arterials located not just in their own city, but also in nearby cities as well.

The TUMF program is designed to provide a network of roads, bridges, interchanges, and railroad grade separations, known as the Regional System of Highways and Arterials (RSHA), needed to accommodate future growth in the area through 2035. The RSHA was developed by the Public Works Directors of the Western Riverside Council of Governments (WRCOG) member jurisdiction. A "Nexus Study" was then prepared in accordance with the California Mitigation Fee Act, which requires that a reasonable relationship exist between the impact fee collected and the proposed improvements for which a fee is used. The study determined the proportion of the cost of the improvements should be borne by different types of development based on the trip generating characteristics of each land use type. The Nexus Study was updated in 2010 and the RSHA was revised to reflect the most current transportation needs and costs for Western Riverside County. The new network reflected several changes due to completed projects and recommendations from the WRCOG Public Works Committee (PWC) to better represent the transportation needs of Western Riverside County.

TUMF is administered by the WRCOG. As administrator, WRCOG receives all fees generated from the TUMF as collected by the local jurisdictions. TUMF funds are programmed by WRCOG's partner agencies, which are responsible for prioritizing projects and overseeing their development.

The TUMF program uses six categories of land uses: two residential categories and four non-residential categories. The two residential types are single-family residential and multifamily residential. Non-residential uses are industrial, retail, service commercial, and high-cube warehouse, with fees assessed at different rates depending on the category. The high-cube warehouses in the WLC would fall into the "high-cube" category of non-residential development. As this fee level, if the WLC builds out completely, it would potentially pay more than $70 million in TUMFs.

TUMF revenues are collected when a development reaches the Building Permit stage. Once collected and administrative costs and a mitigation allocation made to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), TUMF revenues are allocated as follows:

- 46.39 percent is allocated for regional improvements. These revenues are programmed by the RCTC pursuant to an agreement with WRCOG.
- 46.39 percent is allocated to the geographic zone from which the fees are collected. Project prioritization and programming are undertaken by the jurisdictions in each of the five zones.
- 1.64 percent is allocated for regional transit projects. WRCOG administers the funds on behalf of the RTA which prioritizes and programs capital transit projects.
- 1.59 percent is allocated to the Multiple Species Habitat Conservation Plan.
- 4.0 percent is used for program administration.

Since its inception, TUMF has collected more than $686 million in revenues, making it the largest multi-jurisdictional fee program in the nation. It has completed 85 projects with several dozen more under development. The projects successfully funded by the program include a variety of road widening, intersection improvements, and freeway interchanges, including:

- Widening Pigeon Pass Road from 2 lanes to 4 lanes from Climbing Rose Drive to Hidden Springs Drive;
- Widening the Ramona Expressway from 2 lanes to 6 lanes from I-215 to Evans Road;
- Improvements to the Ironwood Avenue/Moreno Beach Drive intersection;
- Improvements to the Ironwood Avenue/Nason Street intersection;
- Adding a northbound lane to Lasselle Street from John F Kennedy Drive to Alessandro Boulevard;

- Widening Oleander Avenue from Perris Boulevard to Indian Avenue;
- The Van Buren Boulevard/SR-91 Interchange Project;
- Widening State Street in Hemet from 2 to 4 lanes with a center turn lane; and
- Widening Sanderson Avenue from Menlo Avenue to Ramona Expressway.

This track record of success is a key reason why the TUMF projects have a good probability of being implemented. Between now and 2040, when the program is scheduled for completion, the TUMF program is forecast to provide nearly $2.9 billion towards a total of $3.7 billion in arterial road, bridge, intersection, and interchange improvements in Western Riverside County. Those components of infrastructure that are subject to and included in the TUMF program are identified in the TIA and this Traffic and Circulation section of the EIR.

4.15.7.2 The City of Moreno Valley Development Impact Fee Program

The City of Moreno Valley's Development Impact Fee (DIF) program is used to fund road and intersection improvements needed to accommodate new residential, commercial, and industrial development. The program collects fees from three categories of residential development (single-family, multi-family, and mobile homes) and five categories of commercial development (general commercial, regional commercial, general industrial, high-cube warehouse, and office) based on their respective trip generating characteristics. In many cases developers dedicate right-of-way and/or construct improvements that are part of the TUMF or DIF programs in lieu of paying the fees. These facilities are typically part of a project's direct frontage or are necessary to accommodate traffic needs in the immediate area of the project. DIF fees on high-cube warehouses are currently set at $1.016 per square foot, which means that the WLC would more than $41 million in DIF fees if the project builds out and is required to pay DIF[8].

DIF funds are overseen by the City's Public Works Department. Department staff monitors traffic volumes and periodically develops a capital improvement program designed to ensure that improvements are installed to help maintain the City's target LOS threshold. The CIP is reviewed and approved by the city council. Examples of projects successfully completed using DIF funds include:

- Iris Ave. from Indian St. to Perris Blvd.
- Lasselle St./Bay Ave. traffic signal
- Lasselle St./Cottonwood Ave. traffic signal
- Cactus Ave. eastbound improvements from I-215 to Veterans Way

Similar to the TUMF, this track record of success is a key reason why the DIF projects have a good probability of being implemented. The DIF program supplements the TUMF program by funding elements of the City's General Plan Circulation Element not covered by TUMF and, in some projects, by providing funds for additional capacity beyond what the TUMF project will provide. The DIF program has been updated several times, most recently in January 2013, to reflect changes in priorities as development occurs in different parts of the City.

Table 4.15-39 shows a sample of transportation improvement projects from the City's Capital Improvement Program that used DIF and/or TUMF funds in combination with other funding sources.

[8] Section 4.8 of the Development Agreement requires Highland Fairview to fully fund or construct all needed improvements within Moreno Valley in lieu of paying the traffic DIF. However, if the court sets aside the Development Agreement then Highland Fairview would pay into DIF.

Table 4.15-39: Projects Using DIF and TUMF in Combination with Other Funding Sources

Project	DIF Funds	TUMF Funds	Other Funds	Sources of Other Funds
Iron Avenue / Heacock Street to Perris Boulevard	$1,509,420	$72,413	$57,358	2005 Lease Revenue Bonds
Nason Street / Cactus Avenue Street Improvements	$9,272,000		$15,910,845	Measure "A"; State-Local Partnership Program; General Fund; General City C.P.; Successor Agency Tax Revenue; Redevelopment Agency Cap. Proj.; Eastern Municipal Water District; Riverside County Flood Control; 2007 Taxable Lease Revenue Bonds
SR-60 / Moreno Beach Drive South Side of Interchange (Phase 1)		$3,500,000	$6,110,735	Successor Agency; Redevelopment Agency
SR-60 / Nason Street Interchange	$740,000		$13,285,777	Measure "A"; Federal Demonstration Funds; Demo Toll Credit - Const.; Surface Transportation Program Local (construction); Surface Transportation Program Local Toll Credit - Const.
Heacock Street South Extension		$300,000	$564,172	Measure "A"
Emergency Vehicle Pre-emption at 117 Traffic Signals	$93,534		$840,000	Highway Safety Improvement Program
Nason Street / Riverside County Regional Medical Center Main Driveway Traffic Signal	$250,000		$50,000	Measure "A"
Transportation Management Center	$316,578		$214,646	Air Quality Management
Lasselle Street / John F. Kennedy Drive to Alessandro Boulevard		$2,757,886	$1,058,143	2005 Lease Revenue Bonds
Kitching Street / Alessandro Boulevard to Gentian Avenue	$11,903		$1,639,854	2005 Lease Revenue Bonds
Pigeon Pass Road Widening / Climbing Rose Drive to North City Limits	$462,239	$679,953	$22,664	Measure "A"
Total	$12,655,674	$7,310,252	$39,754,194	
Percentage of Total	21%	12%	67%	

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

4.15.7.3 Required Improvements

Existing plus Project Direct and Cumulative Project Impacts. As individual projects within the WLC are processed, the City will require that each project do a traffic impact assessment in accordance with City guidelines. These project-level assessments will determine the timing of each transportation improvement measure and will ensure that the impact assumptions made in this programmatic EIR document are consistent with the analysis of potential impacts at the project-specific implementation stage.

This section is devoted to disclosing project impacts and identifying required improvements to improve the impacted location to within the applicable level of service standard. Each impacted facility is discussed in the text and the results are summarized in Tables 4-15-40 through 4-15-41. These tables all follow a similar format which includes the following data fields (columns):

(A) This field identifies the location of the impact.

(B) This field identifies which agency has jurisdiction over the facility in question.

(C) This field shows the agency's target LOS for the facility in question.

(D) This field shows the LOS under Existing conditions. This is used to determine whether or not there is an existing deficiency.

(E) This field shows the LOS under Existing Plus Project conditions. This is used to determine whether or not the project has a significant impact.

(F) This field shows whether there is a significant impact. It is based on the thresholds of significance described in Chapter 4.

(G) This field describes what improvements would be required to achieve the target LOS under Existing Plus Project conditions.

(H) This field states whether the measure described in Column G is feasible or not. In some cases the needed improvements may not be feasible. For example, it may be infeasible to widen a road because doing so would cause major negative impacts to an adjacent neighborhood.

(I) This field shows the LOS after all feasible mitigations have been implemented. If mitigation is infeasible then Column I will be the same as Column E.

(J) This field states whether the impact would still be significant after all feasible mitigation measures have been implemented. For those facilities under the jurisdiction of the City of Moreno Valley (see Column B) a "No" in Column J indicates that the impact will be mitigated to a less than significant level. For those facilities outside the jurisdiction of the City of Moreno Valley, Column J indicates what would happen if the jurisdiction that controls the facility implements the recommended feasible mitigations. However, because the City of Moreno Valley cannot guarantee that the other agency will implement the needed improvement the City cannot guarantee that the impact will be mitigated to a less than significant level.

(K) This field shows whether or not there is an existing deficiency. Generally speaking, under state law a developer is responsible for mitigating the impacts of their project but is not responsible for rectifying existing deficiencies that are the result of earlier projects. They need only pay a fair-share representing the portion of the deficiency that is attributable to their own project.

(L) This field reports the action that the developers of the WLC will be required to take as a condition of approval.

PROJECT DIRECT IMPACTS (SHORT-TERM)

The direct impacts of the WLC project were determined by comparing the LOS of study facilities under Existing and Existing Plus Project conditions. The direct impacts of the project and the associated improvements necessary to obtain the target LOS are as follows.

Road Section Direct Impacts. The project's direct impacts on road sections are summarized in Table 4.15.AV. These impacts and the associated improvements necessary to obtain the target LOS would be:

- ***Gilman Springs Road from Alessandro Boulevard to Bridge Street (S-16)*** is already deficient and needs to be widened to four lanes and will need to be widened to six lanes in the future. In accordance with General Plan Policy 5.5.7, the City will require the developer to widen Gilman Springs Road to provide three southbound lanes and one northbound lane along the frontage of the WLC project. The developer will receive a TUMF credit for the portion of the cost of this improvement that exceeds the project's fair share contribution.

  However, because Gilman Springs Road is partially a Riverside County facility and is thus partially outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made outside of its jurisdiction. Moreover, there are right-of-way constraints involving sensitive environmental areas that may limit widening to four lanes between Alessandro Boulevard and Bridge Street, or even preclude any widening at all. The project's impacts in the Existing Plus Project scenario on Gilman Springs Road must therefore be considered significant and unavoidable. The City will work with Riverside County find funding for improvements that would provide an acceptable LOS on this road to the extent feasible.

- ***Gilman Springs Road from SR-60 to Alessandro Boulevard (S-17)*** is already deficient and needs to be widened to four lanes. In accordance with General Plan Policy 5.5.7, the City will require the developer to widen Gilman Springs Road to provide three southbound lanes and one northbound lane along the frontage of the WLC project. The developer will receive a TUMF credit for the portion of the cost of this improvement that exceeds the project's fair share contribution.

However, because Gilman Springs Road is partially a Riverside County facility and is thus partially outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made outside of its jurisdiction. The project's impacts in the Existing Plus Project scenario on Gilman Springs Road must therefore be considered significant and unavoidable. The City will work with Riverside County to find funding for improvements that would provide an acceptable LOS on this road to the extent feasible.

Redlands Boulevard between Eucalyptus Avenue and the SR-60 eastbound ramps (S-18) is already deficient and needs to be widened to four lanes. This project is in the City's Capital Improvement Program with planned funding from the TUMF and DIF programs. Mitigation is for the developer to pay into the TUMF and to pay a fair-share contribution towards this improvement as a condition of approval.

Intersection Direct Impacts. The project's direct impacts on study intersections are summarized in Table 4.15-40. These impacts and the associated improvements necessary to obtain the target LOS would be:

- **Redlands Blvd./Locust Ave. intersection** (IN-10) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing the intersection and adding an eastbound left-turn and westbound left-turn lanes would reduce project impacts to a less-than-significant level. Improvements to this intersection are already programmed in the RTP, so no action is required by the developer.
- **Redlands Blvd./Eucalyptus Avenue** (IN-18) would exceed the LOS threshold in the PM peak hour under the Existing Plus Build-out Scenario. Adding a westbound right-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.

Table 4.15-40: Existing plus Project Direct Impacts and Mitigation Measures on Roadway Segments

Study Roadway	From	To	Jurisdiction	LOS Standard*	Existing LOS	Existing Plus Build-out LOS	Does the Project have a Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	Is the Mitigation Feasible?	LOS After Feasible Mitigations are Implemented	Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
(A)			(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
Road Section Impacts that can be Mitigated to a Less-Than-Significant Level													
S-18	Redlands Blvd	SR-60 EB Ramps	Eucalyptus Ave	Moreno Valley	C	**E**	**F**	Yes	Widen to 4 lanes	Yes	A	No	Yes	Pay fair share (7.9%)
Road Section Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)													
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge St	Riverside County	D	**F**	**F**	Yes	Widen to 4 lanes	No	**F**	Yes	Yes	N/A**
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	Riverside County	D	**F**	**F**	Yes	Widen to 4 lanes	No	**F**	Yes	Yes	N/A**

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Not applicable because mitigation is infeasible

Indicates LOS exceeds the target level

- **Oliver St./Alessandro Blvd. intersection** (IN-20) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Adding a receiving lane for left turns from Oliver Street would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Moreno Beach Dr./Ironwood Ave.** (IN-36) would exceed the LOS threshold in the AM peak hour under the Existing Plus Build-out Scenario. Adding a northbound right-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Moreno Beach Dr./SR-60 EB Ramps intersection** (IN-37) already exceeds the LOS threshold in the PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Adding a southbound left-turn lane and changing the phasing to protected would reduce project impacts to a less-than-significant level. At time of publication, the needed improvements were already being made to the intersection.
- **Martin Luther King Blvd./Canyon Crest Dr.** (IN-83) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Changing a northbound through lane to a shared through-right-turn lane would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval if the City of Riverside has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection
- **Martin Luther King Blvd./I-215 northbound ramps** (IN-85) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing the intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval if the City of Riverside has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.
- **Central Ave./Chicago Ave.** (IN-86) already exceeds the LOS threshold in the PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Changing a westbound through lane to a shared through-right-turn lane and changing a northbound through lane to a shared through-right-turn lane would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval if the City of Riverside has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must

therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Arlington Ave./Victoria Ave.** (IN-94) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Re-configuring the westbound approach to one left-turn lane, two through lanes, and one right-turn lane would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval if the City of Riverside has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Evans Rd./Orange Ave.** (IN-114) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing the intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Perris. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval if the City of Perris has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Perris to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Bridge St./Ramona Expy.** (IN-122) already exceeds the LOS threshold in the AM and PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection will be eliminated as part of planned improvements to the Ramona Expressway. Therefore, no action is required by the developer.

- **Gilman Springs Rd./Bridge St.** (IN-123) already exceeds the LOS threshold in the AM and PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. intersection** (IN-124) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would

experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **SR-79 (Sanderson Ave.) SB/Gilman Springs Rd.** (IN-125) already exceeds the LOS threshold in the AM and PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **San Timoteo Canyon Rd./Alessandro Rd. intersection** (IN-132) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Redlands. The City will require the developer to pay for a fair share of this improvement as a condition of approval if the City of Redlands has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because this intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Redlands to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **San Timoteo Canyon Rd./Live Oak Canyon Rd. intersection** (IN-133) already exceeds the LOS threshold in the PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **Redlands Blvd./San Timoteo Canyon Rd. intersection** (IN-134) already exceeds the LOS threshold in the PM peak hour and traffic using the intersection would experience longer delays under the Existing Plus Build-out Scenario. Signalizing this intersection and adding an

eastbound right turn and a northbound left turn lane would reduce project impacts to a less-than-significant level.

This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

Table 4.15-41: Existing plus Project Direct Impacts and Mitigation Measures on Intersections

ID	Study Intersection	Jurisdiction	LOS Standard	Existing LOS		Existing Plus Buildout LOS		Does the Project have a Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	Is the Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented ?	Is There an Existing Deficiency?	Developer Action Required
				AM	PM	AM	PM				AM	PM			
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
Intersection Impacts that can be Mitigated to a Less-Than-Signficant Level															
IN-10	Redlands Blvd/Locust Ave	Moreno Valley	C	**D**	**F**	**F**	**F**	Yes	Signalize. Add 1 EB LT and 1 WB LT.	Yes			No	Yes	No action required. Improvement is already in RTP
IN-18	Redlands Blvd/Eucalyptus Ave	Moreno Valley	D	A	A	C	**E**	Yes	Add WB RT pocket. Perm / Ovlp phasing.	Yes			No	No	Implement improvement, with reimbursement agreement based on fair share contribution (19.4%)
IN-20	Oliver St/Alessandro Blvd	Moreno Valley	C	**E**	C	**F**	C	Yes	Add TWLTL on Alessandro Blvd. for 2-stage gap acceptance.	Yes			No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (9.8%)
IN-36	Moreno Beach Dr/Ironwood Ave	Moreno Valley	D	D	D	**E**	D	Yes	Add 1 NB RT lane.	Yes			No	No	Implement improvement, with reimbursement agreement based on fair share contribution (11.3%)
IN-37	Moreno Beach Dr/SR-60 EB Ramps	Moreno Valley	D	C	**E**	**E**	**F**	Yes	Add 1 SB LT Change Phasing to Prot.	Yes			No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (10.6%)
Intersection Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)															
IN-83	Martin Luther King Blvd/Canyon Crest Dr	Riverside (City)	D	**E**	C	**E**	C	Yes	change 1 NBT to NBT-R	Yes			No	Yes	Pay fair share (0.9%)
IN-85	Martin Luther King Blvd/I-215 NB Ramps	Riverside (City)	D	**E**	**F**	**E**	**F**	Yes	Signalize.	Yes			No	Yes	Pay fair share (0.6%)
IN-86	Central Ave/Chicago Ave	Riverside (City)	D	D	**F**	D	**F**	Yes	Change WBT to WBT-R and NBT to NBT-R	Yes			No	Yes	Pay fair share (3.7%)
IN-94	Arlington Ave/Victoria Ave	Riverside (City)	D	**E**	D	**E**	D	Yes	Change WB approach to one left (375 ft storage - existing), 2 through and 1 right (100 ft storage)	Yes			No	Yes	Pay fair share (2.1%)
IN-114	Evans Rd/Orange Ave	Perris	C	**F**	**E**	**F**	**E**	Yes	Signalize	Yes			No	Yes	Pay fair share (1.5%)
IN-122	Bridge St/Ramona Expy	Riverside County	C	**E**	**F**	**F**	**F**	Yes	Signalize.	Yes			No	Yes	No Actions required. Intersection eliminated in the future.
IN-123	Gilman Springs Rd/Bridge St	Riverside County	C	**F**	**F**	**F**	**F**	Yes	Signalize.	Yes			No	Yes	Pay fair share (2.2%)
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	Riverside County	C	**F**	**F**	**F**	**F**	Yes	Signalize.	Yes			No	Yes	Pay fair share (3.9%)
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	Riverside County	C	**E**	**F**	**F**	**F**	Yes	Signalize.	Yes			No	Yes	Pay fair share (3.2%)
IN-132	San Timoteo Canyon Rd/Alessandro Rd	Redlands	D	**F**	C	**F**	**E**	Yes	Signalize.	Yes			No	Yes	Pay fair share (13.1%)
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	Riverside County	C	**F**	**D**	**F**	**F**	Yes	Signalize.	Yes			No	Yes	Pay fair share (11.5%)
IN-134	Redlands Blvd/San Timoteo Canyon Rd	Riverside County	C	**F**	**F**	**F**	**F**	Yes	Signalize. Add 1 EB Right Turn and 1 NB Left Turn.	Yes			No	Yes	Pay fair share (5.4%)

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

- ***SR-79 (Sanderson Avenue) Northbound/Gilman Springs Road Intersection (IN-124)*** already exceeds the LOS threshold in both the a.m. and p.m. peak hours and traffic using the intersection would experience longer delays resulting in an impact in the Existing Plus Project scenario. Signalizing this intersection would reduce project impacts to a less than significant level.

  This intersection is under the jurisdiction of the Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the County of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- ***SR-79 (Sanderson Avenue) Southbound/Gilman Springs Road Intersection (IN-125)*** already exceeds the LOS threshold in both the a.m. and p.m. peak hours and traffic using the intersection would experience longer delays resulting in an impact in the Existing Plus Project scenario. Signalizing this intersection would reduce project impacts to a less than significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- ***San Timoteo Canyon Road/Alessandro Road Intersection (IN-132)*** already exceeds the LOS threshold in the a.m. peak hour and traffic using the intersection would experience longer delays resulting in an impact in the Existing Plus Project scenario. Signalizing this intersection would reduce project impacts to a less than significant level.

  This intersection is under the jurisdiction of the City of Redlands. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. However, because the intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Redlands to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- ***San Timoteo Canyon Road/Live Oak Canyon Road Intersection (IN-133)*** already exceeds the LOS threshold in both the a.m. and p.m. peak hours and traffic using the intersection would experience longer delays resulting in an impact in the Existing Plus Project scenario. Signalizing this intersection would reduce project impacts to a less than significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- ***Redlands Boulevard/San Timoteo Canyon Road Intersection (IN-134)*** already exceeds the LOS threshold in both the a.m. and p.m. peak hours and traffic using the intersection would experience longer delays resulting in an impact in the Existing Plus Project scenario. Signalizing this intersection and adding an eastbound right-turn storage lane with an overlap phase would reduce project impacts to a less than significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval.

However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

Freeway Direct Impacts. Unlike the surface streets, where intersection improvements are generally both feasible and desirable, the strategic situation for freeways in western Riverside County is such that major freeway improvements are becoming increasingly problematic over time. A key problem is that the rights-of way are essentially built out in many locations and cannot be expanded without severe impacts to existing communities (loss of homes and businesses, visual intrusion, increased noise and air quality impacts, etc.) and high costs to replace overcrossing structures. Moreover, there is a growing consensus that over-provision of freeway capacity facilitates long-distance commuting by car and leads to more auto-oriented residential development on the urban fringe, which in turn increases greenhouse gas emissions. This has resulted in a policy shift away from continued expansion of the freeway system, as reflected, for example, in the Riverside County Transportation Commission Ordinance No. 02-001 which reads in part:

"State Routes 91 and 60 and Interstate Routes 15 and 215 cannot cost effectively be widened enough to provide for the traffic expected as Riverside County continues to grow. In addition to the specific highway improvements listed in Section 1 above, congestion relief for these highways will require that new north–south and east-west transportation corridors will have to be developed to provide mobility within Riverside County and between Riverside County and its neighboring Orange and San Bernardino Counties."

In other words, as a matter of policy, with the exception of spot improvements in some specific locations, the overall strategy to relieve congestion on SR-60 and SR-91 is to improve the capacity of surface streets that could serve as alternate routes to freeways. The policy to forego further widening of some sections of SR-60 and SR-91 is also noted in the Riverside County Congestion Management Program (CMP) which permits LOS F for some of the study freeway sections because those sections already operated at LOS F when the CMP was established in 1991. For these reasons, some of the identified mitigation measures may not be pursued even if they are deemed feasible in an engineering sense. In such cases, the project's payment into the TUMF and DIF programs and funding for the surface street improvements would constitute their mitigation because they help create viable alternative routes that would substitute for freeway travel for some trips. For the purposes of this EIR, however, impacts to freeways were treated as significant and unavoidable.

The project's direct impacts on the regional freeway system are summarized in Table 4.15-42. The freeways studied in this report are state facilities outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvements of these freeways as a condition of approval. However, because the freeways are outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place either for collecting fees from WLC or for ensuring the availability of the non-project portion of the needed funds[9], the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.
These impacts and the associated improvements necessary to obtain the target LOS would be:

Direct Impacts on Freeway Mainline Basic Sections

- **Eastbound SR-60 from Ramona Ave. to Central Ave.** (F-3) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The

[9] The City and Highland Fairview are providing funds for a study, currently underway, to determine the feasibility of establishing a freeway impact fee to mitigate the effects of truck traffic from new logistics warehouses in Riverside County.

improvement is identified in the current SCAG RTP and planned to be completed by 2040 independent of the WLC project.

- **Eastbound SR-60 from Mountain Ave. to Euclid Ave.** (F-5) currently operates at an acceptable LOS in the AM peak hour but would exceed the LOS threshold under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2040 independent of the WLC project.
- **Eastbound SR-60 from Euclid Ave. to Grove Ave.** (F-6) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2040 independent of the WLC project.
- **Eastbound SR-60 from Martin Luther King Blvd. to Central Ave.** (F-24) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The Transportation Concept Report does not call for further widening of this section, which could only be accomplished by eliminating the existing shoulder and thus leaving no space for disabled vehicles to pull over. Since this would create safety problems that would be less acceptable than a low LOS, mitigating this impact is infeasible. This impact is therefore significant and unavoidable.
- **Eastbound SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.** (F-29) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.
- **Eastbound SR-91 from Pierce St. to Magnolia Ave.** (F-41) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.
- **Eastbound SR-91 from Adams St. to Madison St.** (F-46) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.
- **Eastbound SR-91 from Central Ave. to 14th St.** (F-49) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition

of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Northbound I-215 from Eucalyptus Ave. to SR-60** (F-95) currently operates at an acceptable LOS but would exceed the LOS threshold in the PM peak hour under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Northbound I-215 from Auto Plaza Dr. to Mill St.** (F-80) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Grove Ave. to Vineyard Ave.** (F-7) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2040 independent of the WLC project.

- **Westbound SR-60 from Vineyard Ave. to Archibald Ave.** (F-8) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2040 independent of the WLC project.

- **Westbound SR-60 from Fair Isle Dr./Box Springs Rd. to I-215** (F-26) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from I-215 to Day St.** (F-27) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the

needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Pigeon Pass Rd. to Heacock St.** (F-29) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from McKinley St. to Pierce St.** (F-40) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Pierce St. to Magnolia Ave.** (F-41) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Magnolia Ave. to La Sierra Ave.** (F-42) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from La Sierra Ave. to Tyler St.** (F-43) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Tyler St. to Van Buren Blvd.** (F-44) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Van Buren Blvd. to Adams St.** (F-45) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Southbound I-215 from Center St. to La Cadena Dr.** (F-75) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent frontage road. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Southbound I-215 from La Cadena Dr. to Barton Rd.** (F-76) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Southbound I-215 from Barton Rd. to Mt. Vernon Ave.** (F-77) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

Table 4.15-42: Existing Plus Project Freeway Impacts and Mitigations

Study Facility		Juris-diction	LOS Standard	Determination of Impact					Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
				Existing		Existing Plus Project		Does the Project Have a Significant Impact?			AM LOS	PM LOS			
				AM	PM	AM	PM								
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
Freeway Mainline Basic Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
F-3	EB SR-60 Ramona Ave to Central Ave	Caltrans	D	**E**	**F**	**E**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	N/A*
F-5	EB SR-60 Mountain Ave to Euclid Ave	Caltrans	D	D	**E**	**E**	D	Yes	Add one mixed flow lane.	Yes	C	C	No	Yes	N/A*
F-6	EB SR-60 Euclid Ave to Grove Ave	Caltrans	D	D	**E**	**E**	**E**	Yes	Add one mixed flow lane.	Yes	C	C	No	Yes	N/A*
F-24	EB SR-60 Martin Luther King Blvd to Central Ave	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	No	**F**	**F**	Yes	Yes	N/A**
F-29	EB SR-60 Pigeon Pass Rd/Frederick St to Heacock St	Caltrans	D	C	**F**	D	**F**	Yes	Add one mixed flow lane.	Yes	B	C	No	Yes	Pay fair share (6.9%)
F-41	EB SR-91 Pierce St to Magnolia Ave	Caltrans	D	**E**	**F**	**E**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (3.1%)
F-46	EB SR-91 Adams St to Madison St	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	No	**F**	**F**	Yes	Yes	N/A**
F-49	EB SR-91 Central Ave to 14th St	Caltrans	D	**F**	**E**	**F**	**E**	Yes	Add one mixed flow lane.	Yes	D	C	No	Yes	Pay fair share (1.4%)
F-95	NB I-215 Eucalyptus Ave to SR-60	Caltrans	D	D	D	D	**E**	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (3.1%)
F-80	NB I-215 Auto Plaza Dr to Mill St	Caltrans	D	C	**F**	C	**F**	Yes	Add one mixed flow lane.	Yes	B	D	No	Yes	Pay fair share (0.7%)
F-7	WB SR-60 Grove Ave to Vineyard Ave	Caltrans	D	D	**F**	C	**F**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	N/A*
F-8	WB SR-60 Vineyard Ave to Archibald Ave	Caltrans	D	D	**F**	D	**F**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	N/A*
F-26	WB SR-60 Fair Isle Dr/Box Springs Rd to I-215	Caltrans	D	D	**E**	D	**E**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (5.7%)
F-27	WB SR-60 I-215 to Day St	Caltrans	D	**E**	D	**E**	D	Yes	Add one mixed flow lane.	Yes	C	B	No	Yes	Pay fair share (7.1%)
F-29	WB SR-60 Pigeon Pass Rd to Heacock St	Caltrans	D	**F**	C	**F**	C	Yes	Add one mixed flow lane.	Yes	C	B	No	Yes	Pay fair share (7.3%)
F-40	WB SR-91 McKinley St to Pierce St	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (1.9%)
F-41	WB SR-91 Pierce St to Magnolia Ave	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (2.0%)
F-42	WB SR-91 Magnolia Ave to La Sierra Ave	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (2.0%)
F-43	WB SR-91 La Sierra Ave to Tyler St	Caltrans	D	D	**F**	D	**F**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (2.2%)
F-44	WB SR-91 Tyler St to Van Buren Blvd	Caltrans	D	C	**E**	C	**E**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (1.8%)
F-45	WB SR-91 Van Buren Blvd to Adam St	Caltrans	D	C	**E**	C	**E**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (1.5%)
F-75	SB I-215 Center St to La Cadena Dr	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	No	**F**	**F**	Yes	Yes	N/A**
F-76	SB I-215 La Cadena Dr to Barton Rd	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (1.4%)
F-77	SB I-215 Barton Rd to Mt. Vernon Ave	Caltrans	D	D	**F**	**E**	**F**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (2.7%)
Freeway Weaving Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
W-20	EB SR-60 Main St to SR-91	Caltrans	D	D	D	**E**	D	Yes	Add one mixed flow lane.	Yes	C	C	No	Yes	Pay fair share (5.4%)
W-79	NB I-215 I-10 to Auto Plaza Dr/Orange Show Rd	Caltrans	D	C	C	D	**E**	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (0.5%)
W-23	WB SR-60 University Ave to Martin Luther King Blvd	Caltrans	D	**E**	**F**	**E**	**F**	Yes	Add one mixed flow lane.	Yes	D	**E**	No	Yes	Pay fair share (4.7%)
W-25	WB SR-60 Central Ave to Fair Isle Dr/Box Springs Rd	Caltrans	D	D	D	**E**	**E**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (4.9%)
W-48	WB SR-91 Arlington Ave to Central Ave	Caltrans	D	D	**E**	D	**E**	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (1.1%)
Freeway Ramps - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
R-1	SR-60 EB On-Ramp from Martin Luther King Blvd	Caltrans	D	**F**	**F**	**F**	**F**	Yes	Add one mixed flow lane.	No	**F**	**F**	Yes	Yes	N/A**

Indicates LOS exceeds the target level

* Project is in the current RTP and is planned to be completed independent of the WLC project

** Not applicable because mitigation is infeasible

Source: Traffic Impact Analysis Report for the World Logistics Center, WSP, July 2018

Direct Impacts on Freeway Weaving Sections

- **Eastbound SR-60 from Main St. to SR-91** (W-20) currently operates at an acceptable LOS in the AM peak hour but would exceed the LOS threshold under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Northbound I-215 from SR-60 to Columbia Ave.** (W-73) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Extending the auxiliary lane beyond the off-ramp would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Northbound I-215 from I-10 to Auto Plaza Dr./Orange Show Rd.** (W-79) currently operates at an acceptable LOS in the PM peak hour but would exceed the LOS threshold under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  I-215 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from University Ave. to Martin Luther King Blvd.** (W-23) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the AM peak hour LOS to within the target threshold and reduce the PM peak hour from "F" to "E".

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.** (W-25) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Arlington Ave. to Central Ave.** (W-48) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

Direct Impacts on Freeway Ramps

- **Eastbound SR-60 on-ramp from Martin Luther King Blvd.** (R-1) already exceeds the LOS threshold in the AM and PM peak hours and traffic density would increase under the Existing Plus Build-out Scenario. Adding a mixed-flow lane would bring the LOS to within the target threshold. The Transportation Concept Report does not call for further widening of this section, which could only be accomplished by eliminating the existing shoulder and thus leaving no space for disabled vehicles to pull over. Since this would create safety problems that would be less acceptable than a low LOS, mitigating this impact is infeasible. This impact is therefore significant and unavoidable.

4.15.7.4 Mitigation Measures

4.15.7.4A: A traffic impact analysis ("TIA"), conforming to the guidelines for TIAs adopted by the City shall be submitted in conjunction with each Plot Plan application within the WLCSP. Prior to the approval of Plot Plans, the City shall review the Revised TIA to determine if any of the traffic improvements listed in the above tables need to be implemented as part of the plot plan. The TIA prepared for the Revised Sections of the FEIR are required to be completed prior to the issuance of a certificate of occupancy for each building. If the City determines that any of the improvements within Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated into insignificance, then the completion of construction of the improvements prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. Construction of improvements within the City shall be subject to reimbursement agreement for those costs that exceed the fair share contribution determined for the specific Plot Plan application. If the City determines that any of the improvements outside Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated to a less than significant level, then the payment of any necessary fair share contribution as prescribed in MM 4.15.7F prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. If the City determines that the traffic impacts which will result from the construction or operation of a building will be significantly more adverse than those shown in the Revised TIA, further environmental review shall be conducted prior to the approval of the Plot Plan pursuant to Public Resources Code § 21166 and CEQA Guidelines § 15162 to determine what additional mitigation measures, if any, will be required in order to maintain the appropriate levels of service.

4.15.7.4B: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the dedication of appropriate right-of-way, where feasible, consistent with the Subdivision Map Act for frontage street improvements contained within the World Logistics Center Specific Plan Circulation Map Required dedications shall be made prior to the issuance of occupancy permits for the requested development.

4.15.7.4C: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the Applicant to construct or to fully fund the transportation measures identified in the development's TIA (see

MM4.15.7.4A) as needed to mitigate the transportation impacts within the city of the Plot Plan development. The payment or construction shall be made prior to the issuance of occupancy permits for the requested development. This condition shall apply only to mitigation measures where a mechanism has been established to collect funds from the project and any other funds to needed to complete the improvements.

4.15.7.4D As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require each project to pay the requisite Transportation Uniform Mitigation Fee (TUMF) as set forth in Municipal Code Chapter 3.44. Required TUMF payments shall be made prior to the issuance of occupancy permits for the requested development.

4.15.7.4E: In order to ensure that all of the Project's traffic impacts are mitigated to the greatest extent feasible, the Applicant shall contribute its fair share of the cost of the needed traffic improvements that are not within the City as identified in the Revised Traffic Impact Analysis, i.e., under the jurisdiction of other cities, the County of Riverside or Caltrans, pursuant to MM 4.15.7.4F. As used in this mitigation measure, the Applicant's "fair share" has been determined in compliance with the requirements of the Fee Mitigation Act, Government Code § 66000 et seq., and, pursuant to § 66001(g), does not require that the Applicant be responsible for making up for any existing deficiencies. Mitigation measures are summarized in Tables 4.15-1 to 4.15-13.

4.15.7.4F The Applicant shall pay its portion of the fair share of the cost of traffic improvements identified in the Transportation Impact Analysis for those significantly impacted road segments and intersections for each warehouse building within the World Logistics Center if the impacted jurisdiction has established a fair share contribution program prior to the approval of a building-specific plot plan. The City shall determine whether a fair share program exists in the impacted jurisdiction and, if one does exist, require that the appropriate fees are paid by the Applicant, consistent with the requirements below, prior to the issuance of a certificate of occupancy for the building in question. If no fair share program exists or if the existing programs are not consistent with the requirements below, then no payment of fees shall be required. The impacts are to be determined on a road segment or intersection basis. Nothing in this condition requires the payment of a traffic impact fee imposed by another jurisdiction which covers improvement to facilities where the Project does not have a significant impact. Fair-share contributions will be determined on a building-by-building basis as a share of the impact of the Project as a whole (for each segment or intersection where the WLC project as a whole has a significant impact identified in the Revised Sections of the FEIR) as determined by the Revised Traffic Impact Analysis and will be due as each certificate of occupancy is issued. The fair share payments for the significantly impacted road segments and intersections identified in the Revised Sections of the FEIR will be required even though the impact resulting from a specific building does not, by itself, cause a significant impact.

For example, the intersection of Martin Luther King Blvd. and the I-215 northbound ramps (Intersection IN-85) in the City of Riverside was identified as a place where the WLC contributes to cumulatively significant impacts, and where the fair share contribution of the WLC project as a whole was computed to be 0.6%. If the City of Riverside establishes a fair share contribution program consistent with this MM to improve that intersection, then when a certificate of occupancy is to be issued for a 2-million sq. ft. high-cube warehouse in the WLC (approximately 5% of the entire WLC project) the amount of the fair share payment due from the Applicant to the City of Riverside would be computed as follows:

Amount Due	=	Total cost of Improvement	*	Total WLC fair Share (0.6%) as determined by TIA	* % attributable to the building that is subject to the certificate of occupancy (5%)

A similar calculation would be done for each subsequent building, with payments for each due at the time of issuance of the certificate of occupancy. As a result, while each building individually would not produce a significant impact, and therefore would not be required to pay any mitigation fees if considered by itself, the total amount of the payments for all of the buildings would be equal to the fair share payment for the entire WLC to the extent that the responsible jurisdiction has chosen to adopt a fair share contribution funding program consistent with MM 4.15.7.4F.

4.15.7.4G: City shall work directly with WRCOG to request that TUMF funding priorities be shifted to align with the needs of the City, including improvements identified in this TIA. Toward this end, City shall meet regularly with WRCOG.

Congestion Management

In addition to and in concert with the mitigation measures defined above for or traffic impacts, the World Logistics Center would incorporate a number of measures that reduce single occupancy vehicle trips as part of design features and required mitigation measures to reduce air quality impacts. These design features and measures, described in more detail in Section 4.3 Air Quality, would create alternatives to single occupancy vehicle trips for those individuals that would be employed at the World Logistics Center. These measures include:

- Participation in Riverside County's Rideshare Program
- Class II bike lanes for all project streets
- Pedestrian pathways throughout the project site
- Pedestrian connections to nearby residential areas
- Provision of bicycle storage space
- Preferential carpool/vanpool parking

In addition, the World Logistics Center Specific Plan requires that mass transit features, such as bus stops, be incorporated into the project, based on consultation with the Riverside Transit Agency.

4.15.7.5 Level of Significance after Mitigation

Even with implementation of **Mitigation Measures 4.15.7.4.A through 4.15.7.4.G**, and implementation of all the improvements identified in Tables 4.15-40 through 4.15-42, direct and cumulative impacts on study area roadway segments, intersections, and freeway facilities would not be reduced to less than significant levels, including all improvement locations not under the control of the lead agency (i.e., outside of the City of Moreno Valley). This is because the primary determinant of the level of significance after mitigation is the agency responsible for the transportation facility in question. The City has no means for controlling when transportation improvements are made outside of its jurisdiction, and therefore, cannot guarantee when such improvements would be made. These roadways, intersections, and freeway facilities are grouped into four categories based on the jurisdiction the transportation facility is located and are summaries as follows.

On-Site Improvements. These are improvements and changes to the road system within the WLC project site that are being undertaken as part of the WLC project. The developer shall be responsible for constructing the improvements described in the TIA (Chapter 4, "Proposed Road Network") in accordance with City standards for roadway construction and the roadway cross-sections in the proposed Specific Plan. Completion of these improvements shall constitute the developer's mitigation of the project's on-site impacts. When these improvements are completed, the project's impacts on the roadway system within the WLC project site will be mitigated to a less-than-significant level.

Off-Site Improvements for Non-TUMF Roads Under the Jurisdiction of the City of Moreno Valley. These are improvements and changes to public streets in Moreno Valley that are outside the area covered by the proposed WLC Specific Plan. The developer shall be responsible for paying its fair

share contribution which the City shall use to implement the mitigation measures identified in Tables 4.15-40, 4.15-41 and 4.15-42 pertaining to facilities under the City's jurisdiction. These payments shall constitute the developer's mitigation of project impacts on this category of roads. When these improvements are completed, the project's impacts on the City roadway and intersection system will be mitigated to a less-than-significant level.

Off-Site Improvements to TUMF Facilities. These are improvements and changes to roads and intersections that are part of the TUMF Regional System of Highways and Arterials, some of which are under the jurisdiction of Moreno Valley and others are located in other jurisdictions. The developer shall be responsible for paying the TUMF fees in effect at the time of approval. These payments shall constitute the developer's mitigation of project impacts to this category of roads and intersections.

The City shall implement the mitigation measures identified in Tables 4.15-40, 4.15-41 and 4.15-42 pertaining to TUMF facilities under the City's jurisdiction. When these improvements are completed, the project's impacts on the roadway and intersection system within the WLC project site will be mitigated to a less than-significant level.

The City shall work with the other member agencies of WRCOG to program TUMF funds to implement the mitigation measures identified in 4.15-40, 4.15-41 and 4.15-42 pertaining to TUMF facilities outside the jurisdiction of the City of Moreno Valley. To the extent that TUMF fees provided by the developer are used to implement the recommended improvements the project's impacts would be less-than-significant. However, because the City does not have direct control over TUMF funding the City cannot ensure that the identified improvements would be made. The project's impacts on these facilities must be considered significant and unavoidable.

Off-Site Improvements to Roads Outside the Jurisdiction of the City and Not Part of the TUMF Program. This category includes all of the recommended mitigation measures that are under the jurisdiction of Riverside County, Caltrans, and other municipalities and that are not included in the TUMF Regional System of Highways and Arterials.

At this time, the City does not have cooperative agreements with neighboring jurisdictions that would serve as a mechanism for collecting and distributing developer funds to cover the cost of cross-jurisdictions mitigation measures, other than the TUMF program. The City shall therefore work with the Cities of Beaumont, Perris, Redlands and Riverside, and with Riverside County to collect funds from the developer and to implement the mitigations measures identified in 4.15-40, 4.15-41 and 4.15-42 that are in these jurisdictions. To the extent that the City is able to establish such a mechanism (as described in Mitigation Measure 4.15.7.4F) and the other jurisdiction constructs the recommended improvement, the project's impacts would be less-than-significant. However, because the City cannot guarantee that such a mechanism will be established and does not have direct control over facilities outside of its jurisdiction the City cannot ensure that the identified improvements would be made. Thus, at this point the project's impacts on these facilities must be considered significant and unavoidable.

Similarly, the City has not entered into an agreement with Caltrans for the collection of developer payments for improvements to the state highway system other than freeway interchange improvements funded through the TUMF program. Nor has Caltrans established a program to collect fair-share contributions to freeway improvements such as those identified in Tables 4.15-40 and 4.15-41. Instead, Caltrans has traditionally relied on other means to fund freeway improvements; means involving multiple stages of review and input from other agencies, with priorities and constraints applied at each stage, that preclude a direct connection between developer-provided fair-share funds and specific highway improvements.

Decisions on funding for improvements to the state highway system are made by four bodies, namely:

- **Legislature:** Establishes overall policies, including determining funding sources and distribution, and spending priorities through state statutes such as Revenue and Taxation Code, Streets and

Highways Code, and Government Code. The Legislature appropriates funds through the annual budget for transportation projects and has authority to designate transportation projects statutorily.

- **California Transportation Commission (CTC):** The nine-member CTC, appointed by the Governor, reviews and adopts the state transportation programs and approves projects nominated by Caltrans and regional agencies for funding. The CTC recommends policy and funding priorities to the Legislature and is also responsible for project delivery oversight.
- **California Department of Transportation (Caltrans):** Caltrans owns, operates and maintains the state highway system. Caltrans plans, designs, and nominates interregional capital improvement projects on the state highway system and also manages the intercity rail operation.
- **Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs):** MPOs and RTPAs are responsible for planning, coordinating and administering funds for regional transportation systems. In California, 17 MPOs and 48 RTPAs develop 20-year Regional Transportation Plans (RTPs) as well as 5-year Regional Transportation Improvement Program (RTIP), which identify projects for the regional portion of the State Transportation Improvement Program (STIP). SCAG is the MPO for Riverside County.

Most funds for improvements to the state highway system come through the State Highway Account (SHA), which receives funding from a variety of sources including:

- Motor vehicle fuel taxes, part of which goes into the Highway Users Tax Account, a portion of which goes to the SHA and the rest goes to cities and counties according to a statutory formula.
- The fuel tax swap, enacted in 2011 (Fuel Tax Swap Fix), reenacted the provisions of the Fuel Tax Swap of 2010 addressing issues raised by the passage of Propositions 22 and 26. The Fuel Tax Swap eliminated the state sales tax on gasoline and instead imposed an additional excise tax on gasoline of 17.3¢ (July 2010). The increase in the excise tax would generate revenues equivalent to what would have been collected from the state sales tax on gasoline. These revenues are intended for new road construction (STIP), highway maintenance and operations (SHOPP), and local roadways.
- The federal fuel tax, which goes into the Highway Trust fund for use on the portions of the system that are designated ad federal aid highways.

In addition, local sales tax measures, such as Measure A in Riverside County, and the proceeds of Proposition 1B provide funding for improvements to certain portions of the state highway system.

The key feature of this system pertaining to the recommended freeway mitigation measures is that this system is outside the control of the City of Moreno Valley. The City shall work with Caltrans to establish a mechanism for collecting funds from developers for use in funding needed freeway improvements. However, since at the present time no such mechanism exists that would ensure that WLC funds contributed to Caltrans or any other state agency would be used to implement specific improvements that mitigate WLC impacts, and there is no mechanism by which the City can construct or guarantee the construction of any improvements to the freeway system by itself, the project's impacts on the state highway system must be considered significant and unavoidable.

4.15.8 Summary of Project-Related Traffic Impacts

Based on the preceding analyses in Sections 4.15.5.1 through 4.15.6.4, the WLC project will have the following direct and cumulative traffic impacts (Table 4.15-43):

Table 4.15-43: Summary of Project-Related Traffic Impacts

Impact	Traffic and Circulation Topic/Issue	Impact Conclusion
4.15.5.1	Air Traffic Patterns	Less than Significant No Mitigation Required
4.15.5.2	Design Hazard Features	Less than Significant No Mitigation Required
4.15.5.3	Emergency Access	Less than Significant No Mitigation Required
4.15.5.4	Alternative Transportation Policies, Plans, or Programs	Less than Significant No Mitigation Required
4.15.6.1	Existing (2018) With Phase 1 Conditions Traffic and Level of Service	Less than Significant with Mitigation (on-site roads and intersections) Less than Significant with Mitigation (roads and intersections included in City) Less than Significant with Mitigation (roads and intersections included in TUMF within City) Significant and Unavoidable with Mitigation (roads and intersections included in TUMF outside City) Significant and Unavoidable with Mitigation (roads and intersections not in TUMF outside City) Significant and Unavoidable with Mitigation (all freeway mainline, weaving, and ramp facilities)
4.15.6.2	Existing (2018) With Project (Buildout) Conditions Traffic and Level of Service	Less than Significant with Mitigation (on-site roads and intersections) Less than Significant with Mitigation (roads and intersections included in City) Less than Significant with Mitigation (roads and intersections included in TUMF within City) Significant and Unavoidable with Mitigation (roads and intersections included in TUMF outside City) Significant and Unavoidable with Mitigation (roads and intersections not in TUMF outside City) Significant and Unavoidable with Mitigation (all freeway mainline, weaving, and ramp facilities)

Table 4.15-43: Summary of Project-Related Traffic Impacts

Impact	Traffic and Circulation Topic/Issue	Impact Conclusion
4.15.6.3	Year 2025 With Phase 1 Conditions Traffic and Level of Service Impacts	Less than Significant with Mitigation (on-site roads and intersections)
		Less than Significant with Mitigation (roads and intersections included in City)
		Less than Significant with Mitigation (roads and intersections included in TUMF within City)
		Significant and Unavoidable with Mitigation (roads and intersections included in TUMF outside City)
		Significant and Unavoidable with Mitigation (roads and intersections not in TUMF outside City)
		Significant and Unavoidable with Mitigation (all freeway mainline, weaving, and ramp facilities)

NOTE TO READERS: The cumulative impact analysis portion of Section 4.16 has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative impact analysis can be found in Section 6.16 of this Revised Sections of the FEIR. In addition, the Energy portion of Section 4.16 in the FEIR has been moved to new Sections 4.17 and 6.17 in the Revised Sections of the FEIR. All other portions of Section 4.16 of the FEIR remain unchanged. The absence of reference to a portion of Section 4.16 means that the corresponding portion of Section 4.16 in the FEIR remains unchanged or has been deleted.

4.16 UTILITIES AND SERVICE SYSTEMS

NOTE TO READERS: This portion of the Revised Sections of the FEIR entirely replaces the energy discussion in Section 4.16.4, *Energy Consumption,* of the FEIR. The portion of Section 4.16.4.7, *Cumulative Impact to Energy Facilities*, has been deleted from the FEIR to allow for its reanalysis to include the impacts expected from other past, present and reasonably foreseeable future projects. The revised cumulative analysis can be found in Section 6.17 of this Revised Sections of the FEIR. The Renewable Energy technical report is included in Appendix E.

4.17 ENERGY

Pursuant to Appendix F of the CEQA Guidelines, this section discusses the energy requirements of the WLC project and addresses the court's ruling that "the FEIR must provide a comparison of feasible, cost-effective renewable energy technologies in the Energy Impacts analysis." This section discusses existing regulations pertaining to energy and provides an analysis of energy use associated with the project, with an emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. This analysis examines the short-term construction and long-term operational impacts and evaluates the effectiveness of Energy Conservation Measures (ECMs) incorporated as part of the project design. It also evaluates prospective renewable energy supply technologies, their feasibility within the project and an evaluation of which supply technology option provides the best renewable energy supply strategy.

The project will incorporate Project Design Features (PDFs) and ECMs that minimize energy consumption and are expected to deliver energy performance that exceeds the current minimum Title 24 requirements by approximately 17 percent at Phase 1 and 16 percent at full buildout. The project will be designed to eliminate the need for natural gas in building systems, positioning the WLC to become an all-electric development with the future potential to operate 100% on renewable electricity.

Pursuant to the World Logistics Center Specific Plan (WLCSP), WLC buildings will include rooftop solar photovoltaic (PV) systems sized, at minimum, to offset the power demands of office space contained in the building. In addition, the project will provide on-site rooftop solar generating capacity up to the maximum level currently permitted by Moreno Valley Electric Utility (MVU), which is currently defined as one-half the minimum electric demand a building experiences during daytime hours. As described herein, this would be more than sufficient to satisfy 100% of the office energy needs. In anticipation of increased electricity loads in the future that could result from a growing electric vehicle fleet, the project will provide solar ready roofs that could accommodate expanded rooftop solar installations in the future.

This section analyzes the project's potential energy impacts based on the following technical studies:

Air Quality, Greenhouse Gas, and Health Risk Assessment Report World Logistics Center Specific Plan April 2018, Environmental Science Associates

World Logistics Center (WLC) Transportation Energy Technical Study, May 2018, Environmental Science Associates and CALSTART.

World Logistics Center (WLC) Comparison of Renewable Energy Technologies Report, May 24, 2018, WSP

4.17.1 Existing Setting

4.17.1.1 Existing Site Energy Use

The existing project Site is largely vacant with a few residences and scattered dry farming that generates minimal demand for electricity, natural gas, and transportation fuels. With implementation of the project, these uses would largely cease and be replaced. For the purposes of this analysis, a "zero demand" baseline was assumed; thus, the net change from baseline calculated for these analyses are conservative, representing a hypothetical "worst case".

4.17.1.2 Existing Electricity Supply and Transmission

Southern California Edison (SCE) currently has two existing 115 kilovolt (kV) overhead power transmission lines within the WLC site limits. One is located along Gilman Springs Road from the south to Eucalyptus Avenue, then east on Eucalyptus Avenue to World Logistics Parkway and then north on World Logistics Parkway across SR-60. The second 115 kV transmission line is located along Brodiaea Avenue from the west to Davis Road then southeast into the San Jacinto Wildlife Area. In the project area, SCE also maintains 12 kV overhead distribution lines along Redlands Boulevard, World Logistics Parkway, and Alessandro Boulevard just west of the project site.

The WLC project would be supplied electricity by Moreno Valley Electric Utility (MVEU). MVEU currently has an existing electrical substation west of the project area at the southwest corner of Moreno Beach Drive and Cottonwood Avenue. This substation currently has a capacity to distribute 28 megawatts (MW) of electricity based on two existing 28 MW units (i.e., if one unit goes off, the other unit still maintains capacity to handle the demand). Ultimate capacity of this substation is 90 MW based on four 28 MW units. The current peak load for this substation is 22 to 26 MW; therefore, there is an existing 2 to 6 MW surplus capacity available. MVEU has underground 12 kV distribution lines along Cottonwood Avenue from the west to Redlands Boulevard, then north along Redlands Boulevard to Fir Street (now Eucalyptus Avenue), and then east along Eucalyptus Avenue to World Logistics Parkway. The existing underground conduit underlying Eucalyptus Avenue currently serves the existing Skechers warehouse, office, and factory store. It should be noted that the MVEU indicated these assumptions are valid at this time, but could change if other development occurs before the project.

4.17.1.3 Existing Natural Gas Supply and Transmission

The WLC project would be supplied natural gas by the Southern California Gas Company (SCGC). SCGC currently maintain a 4-inch medium-pressure service line underlying Redlands Boulevard that runs from SR-60 on the north to Cactus Avenue on the south and then runs west along Cactus Avenue with a stub-out to the north at Merwin Street. SCGC has low-pressure facilities that serve the residential areas located west of Redlands Boulevard and southwest of Merwin Street and Bay Avenue.

Throughout the WLC site, there are existing high-pressure natural gas transmission mains ranging in diameters of 16 inches up to 36 inches. SCGC currently maintains two 30-inch diameter transmission pipelines traversing the project site that run in an east-west direction and are located north and south of Alessandro Boulevard. There are also three transmission pipelines (a 16-inch, 30-inch, and 36-inch diameters) that run in a north-south direction along Virginia Street, south of Alessandro Boulevard. The 36-inch diameter pipeline also runs east from Virginia Street parallel with the 30-inch pipeline that runs south of Alessandro Boulevard.

Within the WLC site, SCGC maintains a gas line blow-down facility and flow metering station at Alessandro Boulevard and Virginia Street. Further south on Virginia Street, the San Diego Gas and Electric Company (SDG&E) maintains a natural gas compression station, known as the Moreno Compressor Station, which supplies gas to San Diego via 16-inch, 30-inch, and 36-inch transmission pipelines that continue to the south. SCGC has a gas transmission regulator station located at the southeast corner of Gilman Springs Road and Laurene Lane east of the WLC project site.

Questar currently maintains a 16-inch gas transmission pipeline that underlies Alessandro Boulevard from Gilman Springs Road to World Logistics Parkway, where it heads south to the Maltby Avenue alignment and then heads west toward Redlands Boulevard.

4.17.1.4 Existing Regional Electricity Demand

The MVU is the primary utility provider for the residences and businesses of Moreno Valley and is the utility provider to the WLC project. Southern California Edison does provide electrical service to a portion of the City and has existing facilities running through the project. The annual electricity sale to

all customers in the MVU service area for the 2015-2016 fiscal year was approximately 185 million kilowatt hours (kWh).[1]

4.17.1.5 Existing Regional Natural Gas Demand

Southern California Gas Company (SoCal Gas) is responsible for providing natural gas to 21.6 million consumers through 5.9 million meters in more than 500 communities throughout Central and Southern California and is regulated by the California Public Utilities Commission and other state agencies.[2] The annual natural gas sale to customers in 2017 was approximately 311,535 million kilo British thermal units (kBtu).[3] The consumption of natural gas by residences and businesses exclusively within Moreno Valley is not known.

4.17.1.4 Existing Regional Transportation Energy Demand

According to the California Energy Commission (CEC), transportation accounts for nearly 37 percent of California's total energy consumption.[4] Based on available fuel consumption data from the CEC, in 2016, Riverside County consumed a total of 1,035,000,000 gallons of gasoline for transportation.[5] California consumed a total of 273,000,000 gallons of diesel fuel for transportation.[6] Transportation fuels, primarily gasoline and diesel, are provided by local or regional suppliers and vendors.

According to the California Air Resources Board on-road vehicle emissions factor (EMFAC2014) model, the average fuel economy for the fleet-wide mix of vehicles operating in the South Coast Air Basin region is approximately 20.17 miles per gallon for gasoline-fueled vehicles and approximately 7.81 miles per gallon for diesel-fueled vehicles. Gasoline-fueled vehicles account for approximately 96 percent of the total vehicles and diesel-fueled vehicles account for approximately 3.6 percent of the total vehicles.[7] Electric vehicles account for approximately 0.3 percent of the total vehicle registration in California.

4.17.2 Regulatory Setting

4.17.2.1 Federal

Energy Policy Act of 1992. The Energy Policy Act (EPAct) of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain Federal, State, and local governments and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAct. Federal tax deductions will be allowed for businesses and

1 City of Moreno Valley, Moreno Valley Utility, 2015/16 Annual Report, 2016 http://www.moreno-valley.ca.us/resident_services/utilities/pdfs/mvuAnnualReport0217.pdf Accessed April 2018.

2 Southern California Gas Company, https://www.socalgas.com/about-us/company-profile Accessed April 2018.

3 Sempra Energy, 2017 Annual Report, (2018). Available at: http://www.sempra.com/sites/default/files/content/files/node-page/file-list/2018/2017_annualreport_sre.pdf. Accessed April 2018. Converted from 294 billion cubic feet and a conversion factor of 1,035 Btu per cubic foot based on USEIA data (see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, April 28, 2017. Available: https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed April 2018).

4 California Energy Commission, 2015 Integrated Energy Policy Report, CEC-100-2015-001-CMF, 2016, page 153, http://www.energy.ca.gov/2015_energypolicy. Accessed April 2018.

5 California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018.

6 California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

7 Based on the California Air Resources Board on-road vehicle emissions model, EMFAC2014 (Modeling input: South Coast Area Air Basin; LDA, LDT1, LDT2; Annual; 2020). The modeling input values are considered generally representative of project buildout conditions for the region and representative of the majority of vehicles associated with project-related VMT.

individuals to cover the incremental cost of AFVs. States are also required by the Act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005. The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a Federal purchase requirement for renewable energy.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's Highway Traffic and Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The vehicles had to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards were designed to cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO2 per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.[8]

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses. For combination tractors, the agencies proposed engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model year (12% and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles (includes other vehicles like buses, refuse trucks, concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the agencies proposed engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year. Building on the success of the standards, the EPA and U.S. Department of Transportation jointly finalized additional standards for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution.

4.17.2.2 State

California Code of Regulations Title 24, Part 6. The California Energy Code (Title 24, Section 6) was created as part of the California Building Standards Code (Title 24 of the California Code of Regulations) by the California Building Standards Commission in 1978 to establish statewide building energy efficiency standards to reduce California's energy consumption. These standards include provisions applicable to all buildings, residential and nonresidential, which describe requirements for documentation and certificates that the building meets the standards. These provisions include mandatory requirements for efficiency and design of energy systems, including space conditioning

[8] United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, (August 2012). Available at: http://www.epa.gov/oms/climate/documents/420f12051.pdf. Accessed April 2018.

(cooling and heating), water heating, and indoor and outdoor lighting systems and equipment, and appliances. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle as technology and methods have evolved. The 2016 Standards, effective January 1, 2017, focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations. The next code update (2019) is expected to focus on integrating solar photovoltaic (PV) and other renewables with energy storage, taking Title 24 another step closer toward the state's zero net energy (ZNE) goals as spelled out in the California Energy Efficiency Strategic Plan (CEC, 2011), calling for all new residential construction to be ZNE by 2020 and all new commercial construction to be ZNE by 2030.

California Code of Regulations Title 24, Part 11. The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development in 2008. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017.

2016 Title 24, Part 11 includes construction requirements for non-residential projects that are designed to facilitate installation of future electric vehicle supply equipment (EVSE) to support electric vehicle (EV) charging. Under section 5.106.5.3, construction plans and specifications for large (projects with more than 200 total parking spaces) must include raceways for future EVSE at a minimum of 6 percent of the total parking spaces.

Renewable Electricity Standards. There have been several renewable electricity senate bills in California. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewables Portfolio Standard (RPS) target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the CARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. Senate Bill X1-2 (2011) codifies the Renewable Electricity Standard into law.

Senate Bill 350: The Clean Energy and Pollution Reduction Act of 2015 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 (1) increases the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) requires the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provides for the evolution of the Independent System Operator (ISO) into a regional organization; and (4) requires the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions. Among other objectives, the Legislature intends to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Pavley Regulation, Advanced Clean Cars (ACC), and the California Mobile Source Strategy. Assembly Bill 1493 (2002) requires CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation

manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The federal Clean Air Act ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed to set its own standards with a federal waiver from the USEPA, granted in 2009. Known as the Pavley Clean Car Standards, AB 1493 regulated GHG emissions from new passenger vehicles (light duty automobiles and medium duty vehicles) from 2009 through 2016.

In January 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for model years 2015 through 2025. The program includes components to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. The zero emissions vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles (PHEV) in the 2018 to 2025 model years (CARB, 2017).

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years, through a transition to ZEVs, cleaner transit systems and reduction of vehicle miles traveled. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for class 3 – 7 "last mile" delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels (CARB, 2016).

Transportation Electrification. Complementing the Mobile Source Strategy and the state's push toward zero carbon electricity, SB 350 orders the CPUC to direct the six investor-owned electric utilities in the state to file Applications for programs that "accelerate widespread transportation electrification." These programs are required to reduce dependence on petroleum, increase the adoption of zero-emission vehicles, help meet air quality standards, and reduce GHG emissions.

On January 11, 2018, the CPUC approved the first transportation electrification applications under SB 350 from the three large investor-owned utilities. The decision approves 15 projects with combined budgets of $42 million. In SCE territory, $16 million was approved for projects that help expand residential and transit bus EV charging infrastructure, including in or adjacent to disadvantaged communities, as well as crane and heavy duty vehicle electrification at the Port of Long Beach. In PG&E and San Diego Gas and Electric territories, projects are similar but also include electrification of delivery vehicles and commercial shuttle fleets, and demonstration projects for electrification of school buses and medium- or heavy-duty vehicles fleets (CPUC, 2018).

Executive Order B-16-2012 (Zero-Emission Vehicles). This executive order indicates that all State entities under the Governor's control support and facilitate the rapid commercialization of zero-emission vehicles. The order contains a target similar to Executive Order S-3-05, but for the transportation sector instead of all sectors: that California target for 2050 a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels. Executive order B-16-2012 also indicates that the CARB, the California Energy Commission, the Public Utilities Commission and other relevant agencies are ordered to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following:

- By 2015: The State's major metropolitan areas able to accommodate zero-emission vehicles, each with infrastructure plans and streamlined permitting; the State's manufacturing sector expend zero-emission vehicle and component manufacturing; an increase in the private sector's investment in zero-emission vehicle infrastructure; and the State's academic and research institutions contributing to zero-emission vehicle research, innovation and education.

- By 2020: The State's zero-emission vehicle infrastructure ability to support up to one million vehicles; the costs of zero-emission vehicles competitive with conventional combustion vehicles; zero-emission vehicles accessible to mainstream consumers; widespread use of zero-emission vehicles for public transportation and freight transport; and a decrease in transportation sector GHG emissions as a result of the switch to zero-emission vehicles; electric vehicle charging integrated into the electricity grid.
- By 2025: over 1.5 million zero-emission vehicles on California roads; easy access to zero-emission vehicle infrastructure in California; the zero-emission vehicle industry strong and sustainable part of California's economy; and California's vehicles displace at least 1.5 billion gallons of petroleum fuels per year.

Sustainable Freight Action Plan. Executive Order B-32-15 directed the State to establish targets to improve freight efficiency, transition to zero emission technologies, and increase the competitiveness of California's freight transport system. The targets are not mandates, but rather aspirational measures of progress towards sustainability for the State to meet and try to exceed. The targets include:

- System Efficiency Target: Improve freight system efficiency by 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030.
- Transition to Zero Emission Technology Target: Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- Increased Competitiveness and Economic Growth Targets: Establish a target or targets for increased State competitiveness and future economic growth within the freight and goods movement industry based on a suite of common-sense economic competitiveness and growth metrics and models developed by a working group comprised of economists, experts, and industry. These targets and tools will support flexibility, efficiency, investment, and best business practices through State policies and programs that create a positive environment for growing freight volumes and jobs, while working with industry to mitigate potential negative economic impacts. The targets and tools will also help evaluate the strategies proposed under the Action Plan to ensure consideration of the impacts of actions on economic growth and competitiveness throughout the development and implementation process.

California Transportation Plan 2040. The California Transportation Plan (CTP) 2040 provides a long-range policy framework to meet future mobility needs and reduce GHG emissions. The CTP defines goals, performance-based policies, and strategies to achieve maximum feasible emission reductions in order to attain a statewide reduction in GHG emissions.

The CTP 2040 recognizes that the Governor is committed to reduce by one-half current petroleum use in cars and trucks; increase from one-third to one-half the electricity derived from renewable sources; double the efficiency savings of existing buildings and make heating fuels cleaner; reduce the release of methane, black carbon, and other short-lived climate pollutants; and manage farm and rangelands, forests, and wetlands to store more carbon.

Transportation GHG reduction strategies within the CTP 2040 include demand management (including telecommuting/working at home, increased carpoolers, and increase car sharing), mode shift (including transit service improvements, high-speed rail, bus rapid transit, expanded bike and pedestrian facilities, carpool land occupancy requirements, and increased HOV lanes), travel cost (implement expanded pricing policies), and operational efficiency (incident/emergency management, Caltrans' Master Plan, ITS/TSM, and eco-driving).

Low Carbon Fuel Standard, Executive Order S-01-07. The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandated that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the

executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009. The LCFS requires producers of petroleum based fuels to reduce the carbon intensity of their products, beginning with a quarter of a percent in 2011, ending in a 10 percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS Credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas or hydrogen. The LCFS was challenged in the United States District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against the CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the CARB to continue to implement and enforce the regulation and vacated the injunction on September 18, 2013, and remanded the case to the district court for further consideration. With the adoption of the 2017 Scoping Plan Update, the LCFS has been increased to an 18 percent reduction in carbon intensity by 2030.

2017 Scoping Plan Update. On December 14, 2017, CARB approved the final version of *California's 2017 Climate Change Scoping Plan* (2017 Scoping Plan Update), which outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels.[9] The 2017 Scoping Plan Update identifies key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. As of 2015, California's emissions totaled approximately 440 $MMTCO_2e$. The emissions breakdown is as follows: 37 percent from transportation, 21 percent from industrial sources, 11 percent from in-state electricity generation, 9 percent from commercial and residential, 8 percent from imported electricity generation, 8 percent from agriculture, 4 percent from high global warming potential gases, and 2 percent from recycling and waste. Through a combination of data synthesis and modeling, CARB determined that the target Statewide 2030 emissions limit is 260 $MMTCO_2e$, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO2e beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2050 limit set forth by Executive Order B-30-15.

The 2017 Scoping Plan Update's strategy for meeting the 2030 GHG target incorporates the full range of legislative actions and state-developed plans that have relevance to the year 2030. These include:

- Extending the LCFS beyond 2020 and increasing the carbon intensity reduction requirement to 18 percent by 2030;
- Senate Bill 350, which increases the RPS to 50 percent and requires a doubling of energy efficiency for existing buildings by 2030;
- The 2016 Mobile Source Strategy targets for more ZEVs and much cleaner trucks and transit (described in more detail below);
- The Sustainable Freight Action Plan to improve freight efficiency and transition to zero emission freight handling technologies (described in more detail below);
- Senate Bill1383, which requires a 50 percent reduction in anthropogenic black carbon and a 40 percent reduction in hydrofluorocarbon and methane emissions below 2013 levels by 2030; and
- Assembly Bill 398, which extends the state Cap-and-Trade Program through 2030.

California's climate stabilization strategy relies on contributions from all sectors of the economy, which includes continued investment in renewable energy such as solar roofs, wind, and other types of distributed generation. In addition to being an integral factor in meeting GHG reduction goals, shifting

[9] CARB, *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November, 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf; Accessed April 2018.

to clean, local, and efficient use of energy also reinvests energy expenditures on local economies and reduces risks associated with exposure to volatile global and national oil and gas commodity prices (CARB, 2017).

California Cap and Trade Program. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the cap-and-trade program is a core strategy in the Scoping Plan for the state to meet its reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020.[10] Under the Cap-and-Trade program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO_2e per year) and declines over time, and facilities subject to the cap can trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration.[11] On July 17, 2017 the California legislature passed Assembly Bill 398, extending the Cap-and-Trade program through December 31, 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 and 2030 statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not direct GHG emissions reductions to occur in any discrete location or by any particular source. Rather, GHG emissions reductions are assured on a State-wide basis.

CARB Low NOx Regulation. CARB has identified that reductions of up to 90 percent are needed for heavy-duty trucks to meet NOx reduction targets. In 2013, California established an optional low-NOx standard to pave the way for a future mandatory standard. A more stringent low-NOx regulation is expected in the 2021/2023 timeframe. When implemented, this regulation will continue to drive the deployment of zero or near-zero emissions truck solutions. This development has been taken into consideration in estimating the number of zero emission trucks projected in this study.

CARB Advanced Clean Local Truck Rule. The goal with the Advanced Clean Local Truck Rule is to accelerate the early market adoption of zero emission trucks that are usually centrally fueled, have duty cycles with low average speed and stop-and-go operation. The rule focuses on urban, mostly vocational trucks, but includes heavy truck (class 7-8) urban goods movement as well. The proposed regulatory schedule begins with the 2023 vehicle model year with early action credits given for pre- 2023 vehicle models. The regulation is scheduled for CARB board consideration in November 2018.

The Clean Port Plan 2.0 for Ports of Long Beach and Los Angeles. The ports of Long Beach and Los Angeles have set goals to drastically reduce air pollution over the next decades and move towards zero emissions solutions. It is anticipated that new fee structures will be implemented in 2021 that favors low-NOx engine and zero emission solutions.

SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In April, 2016, the Southern California Association of Governments (SCAG) adopted the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which provides a vision for transportation throughout the region for the next 25 years. It considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2016 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction by 2020,

[10] 17 CCR §§ 95800 to 96023.
[11] See generally 17 CCR §§ 95811, 95812.

18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level on a per capita basis.

The 2016 RTP/SCS includes $70.7 billion in goods movement strategies, and a Goods Movement Appendix that addresses the region's challenges in moving freight while reducing harmful emissions generated by trucks and other goods movement sources.

SCAG Comprehensive Regional Goods Movement Plan and Implementation Plan. This report from SCAG, issued in 2012, presents a long-range comprehensive plan for the goods movement system in Southern California. The Plan is designed to ensure that the region continues to play a vital role in the global supply chain while meeting regional economic goals, addressing critical mobility challenges, preserving the environment, and contributing to community livability and quality of life goals. The Plan is the final product of the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, a four-year effort to collect data, conduct analyses, and engage with regional, statewide and national stakeholders covering various aspects of the region's goods movement system

CARB Heavy-Duty On-Road and Off-Road Vehicle Regulations. In 2004, the CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007 aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation has shown an increase in energy savings in the form of reduced fuel consumption from more fuel efficient engines.

4.17.2.5 City of Moreno Valley

City of Moreno Valley General Plan Policies. The City adopted its General Plan in 2006. The General Plan's Conservation Element contains policies directly related to energy efficiency and renewable energy listed below:

Objective 7.5 Encourage efficient use of energy resources

Policy 7.5.1 Encourage building, site design, and landscaping techniques that provide passive heating and cooling to reduce energy demand.

Policy 7.5.2 Encourage energy efficient modes of transportation and fixed facilities, including transit, bicycle, equestrian, and pedestrian transportation. Emphasize fuel efficiency in the acquisition and use of City-owned vehicles.

Policy 7.5.5 Encourage the use of solar power and other renewable energy systems.

City of Moreno Valley Climate Action Strategy. The City of Moreno Valley approved the Energy Efficiency and Climate Action Strategy (Strategy) in October 2012. The Strategy identifies ways that the City can reduce energy and water consumption and GHG emissions as an organization (its

employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and GHG emissions. The Strategy contains the following policies to reduce GHG emissions in 2010 by 15 percent by 2020:

R2-T1 *Land Use Based Trips and VMT Reduction Policies.* Encourage the development of Transit Priority Projects along High Quality Transit Corridors identified in the SCAG Sustainable Communities Plan, to allow a reduction in vehicle miles traveled.

R2-T3 *Employment-Based Trip Reductions.* Require a Transportation Demand Management (TDM) program for new development to reduce automobile travel by encouraging ride-sharing, carpooling, and alternative modes of transportation.

R2-E1 *New Construction Residential Energy Efficiency Requirements.* Require energy efficient design for all new residential buildings to be 10 percent beyond the current Title 24 standards.

R2-E2 *New Construction Residential Renewable Energy.* Facilitate the use of renewable energy (such as solar [photovoltaic] panels or small wind turbines) for new residential developments. Alternative approach would be the purchase of renewable energy resources off site.

R2-E5 *New Construction Commercial Energy Efficiency Requirements.* Require energy efficient design for all new commercial buildings to be 10 percent beyond the current Title 24 standards.

R3-E1 *Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining.* Updating of codes and zoning requirements and guidelines to further implement green building practices. This could include incentives for energy-efficient projects.

R3-L2 *Heat Island Plan.* Develop measures that address "heat islands." Potential measures include using strategically placed shade trees, using paving materials with a Solar Reflective Index of at least 29, an open grid pavement system, or covered parking.

R2-W1 *Water Use Reduction Initiative.* Consider adopting a per capita water use reduction goal which mandates the reduction of water use of 20 percent per capita with requirements applicable to new development and with cooperative support of the water agencies.

R3-W1 *Water Efficiency Training and Education.* Work with EMWD and local water companies to implement a public information and education program that promotes water conservation.

R2-S1 *City Diversion Program.* For solid waste, consider a target of increasing the waste diverted from the landfill to a total of 75 percent by 2020.

Moreno Valley Utility 2015 Integrated Resource Plan (IRP). MVU provides electrical services to approximately 6,000 customers. MVU's main guidance document to plan for future growth and development is the 2015 IRP which forecasts a 10-year planning period from 2015 to the horizon year of 2024. The purpose of the IRP is to identify key considerations to meet future energy demand, increase local renewable energy projects, and plan for large-scale logistics and distribution centers that are increasingly prevalent in the region. As stated above, electricity sales for 2015 totaled 185 million kWh and the IRP forecasts growth in sales to be 352,044 million kWh by the horizon year of 2024.

MVU previously offered a solar net energy metering program to their customers, but in MVU's latest Electric Rates Schedule for Net Energy Metering, adopted April 17, 2018, this schedule is closed to new applicants effective April 2018. Furthermore, per *Resolution No. 2017-20* the "maximum solar generating capacity that will be approved to be connected to each meter is up to 50% of the meter

minimum daytime load." This limits the amount of on-site solar generation that can be installed at WLC buildings.

4.17.3 Methodology

The analysis addresses the project's potential impacts related to energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation is assessed. The potential for on-site generation of renewable energy is also assessed. Specific analysis methodologies are discussed below. Calculations are provided in Appendix E.

4.17.3.1 Construction

Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the Site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources.

Energy use during construction is forecasted by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). The energy usage required for project construction has been estimated based on the number and type of construction equipment that would be used during project construction, the extent that various equipment is utilized in terms of equipment operating hours or miles driven, and the estimated duration of construction activities. Energy for construction worker commuting trips has been estimated based on the predicted number of workers for the various phases of construction and the estimated VMT.

The heavy duty construction equipment would likely be diesel-fueled (with the exception of construction worker commute vehicles, which would primarily be gasoline-fueled). For the purposes of this assessment, it is conservatively assumed heavy-duty construction equipment and haul trucks would be diesel-fueled and construction equipment would be in operation for the entire construction day. This represents the maximum potential energy use during construction since some equipment could feasibly be electric or gasoline powered and be less energy intensive and since it is unlikely that equipment would be in operation for the entire construction day. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB off-road vehicle (OFFROAD) emissions model, which is a state-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC emissions model, which is a state-approved model for estimating emissions for on-road vehicles and trucks. Both OFFROAD and EMFAC are incorporated into the California Emissions Estimator Model (CalEEMod), which is a state-approved emissions model used for the project's air quality and GHG emissions assessment. Therefore, this energy assessment is consistent with the modeling approach used for other environmental analyses in the EIR and consistent with general CEQA standards.

4.17.3.2 Operation

The WLC project would require energy in the form of electricity and natural gas for the operation of buildings and infrastructure (heating, cooling, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs) and gasoline, diesel, natural gas, and electricity (to charge plug-in EVs) for vehicles traveling to and from the project site. The project would also require energy from natural gas use for on-site forklifts and yard trucks associated with warehousing activities.

The project's estimated building and infrastructure energy consumption was calculated in the WLC *Comparison of Renewable Energy Technologies* report (WSP, 2018). The energy usage required for project building and infrastructure operations is estimated based on the net change in energy demand from the new buildings and facilities compared to the existing uses (as described above, the existing energy usage is conservatively assumed to be zero). project building and infrastructure operations will

consume energy directly through electricity used to power equipment and appliances on-site, and indirectly, through the demand for water. On-site energy usage takes into account building energy standards pursuant to the 2016 Title 24 Building Standards Code and CALGreen Code, the sustainability measures in the WLCSP for which the effect can be quantified, and Mitigation Measures prescribed in the Revised Sections of the FEIR. Refrigerated warehouse space is not an allowed use within the WLC site (see Mitigation Measure 4.3.6.3E in the Revised Sections of the FEIR). Energy usage from water demand (e.g., electricity used to supply, convey, treat, and distribute) is based on predicted annual water demand rates (which in turn are based on the size and type of future land uses) and state-wide averages regarding the amount of electricity needed to pump, treat, and transport each gallon of potable water and sewage.

Energy for transportation from increased activities to, from, and on the WLC site is estimated based on the predicted number of trips and the estimated VMT per trip. Trip types include employees commuting to and from home, vendors and deliveries associated with operation of the future uses, trucks bringing goods to and from the proposed warehousing facilities, and off-road mobile equipment needed for cargo/material handling (fork lifts, etc.). The estimated fuel economy for on-road vehicles is based on fuel consumption factors from the CARB EMFAC emissions model. As discussed above, EMFAC is incorporated into CalEEMod, which is a state-approved emissions model used for the project's air quality and GHG emissions assessment. Therefore, this energy assessment is consistent with the modeling approach used for other environmental analyses in the Revised Sections of the FEIR and consistent with general CEQA standards. However, additional analysis was required to quantify the increased electricity use and decreased fuel use associated with higher fleet penetration of electric vehicles (EVs) expected with implementation of California's 2016 Mobile Source Strategy, which is not incorporated into EMFAC 2014 (for more information see next section on Technology Development).

CNG/LNG station fuel use was estimated based on assumptions outlined in the traffic study. The traffic study assumed all visits to the station were from trucks. The estimated number of CNG/LNG trucks visiting the station each day was multiplied by the typical tank size of a CNG/LNG truck and then calculated over the span of a year to result in annual fueling demand.

4.17.3.3 Renewable Energy

To supply the project with electricity, the *Comparison of Renewable Energy Technologies* report considered on-site and off-site options for integrating the use of renewable energy and optimizing onsite energy management. A comprehensive list of prospective energy resources was evaluated, and a screening process was applied to winnow the options down to those that hold the greatest potential for being successfully implemented at WLC. Screening criteria causing certain energy supply options to be discarded involved safety considerations, regulatory barriers, air emissions concerns and technical impracticalities. Several on-site supply options were deemed infeasible for WLC, including the use of biomass energy, biogas/landfill gas, district energy system, microgrid, in-line hydroelectric turbines in water transmission pipelines, natural gas pressure recovery, and local wind generation.

Onsite energy supply options considered feasible include ground-source heat pumps (GSHPs); combined cooling, heat, and power (CCHP); and solar photovoltaic (PV) with and without battery storage:

- GSHP is not recommended in the WLC location due to the cooling requirements within the building being much greater than the building heating needs as a result of year-round weather conditions at the WLC site. Such an imbalance would cause the geoexchange field (where excess heat removed from the building by the cooling process is transferred via piping into the ground) to grow increasingly warmer over time. This, in turn, would degrade GSHP performance in providing building space cooling.
- CCHP produces air emissions, resulting from the combustion of fossil fuels, that exacerbate the poor air quality of Moreno Valley and the entire South Coast Air Quality Basin. Furthermore,

CCHP increases the project's GHG emissions since it produces more GHG emissions than California's increasingly green grid.

- On-site solar PV generation is scalable and is becoming more cost competitive as project size increases.

As described in Section 4.17.5 (Project Design Features), the *Comparison of Renewable Energy Technologies* report (WSP, 2018) found that onsite rooftop PV systems without energy storage were determined to be the project's best sustainable clean energy supply option. Pursuant to the WLCSP, the rooftop solar PV generating capacity for the project will be designed at minimum to offset the power demands of office space contained in the building. In addition, the project proponent is committed to requiring on-site rooftop solar generating capacity up to the maximum level currently permitted by MVU, which is defined as one-half the minimum electric demand a building experiences during daytime hours.

To determine the specific allowable PV capacity at the WLC site, the *Comparison of Renewable Energy Technologies* report analyzed the hourly electric loads using energy simulation software. Phase 1 building simulation produced a minimum daytime electric load of about 600 kW. The minimum daytime electric load at buildout was simulated to be about 1,600 kW. The offices in each typical WLC building would consume about 474,120 kWh/yr in Phase 1 and experience a peak electric demand of about 280 kW. At buildout, the offices in each building would consume about 417,230 kWh/yr and experience a peak demand of about 270 kW. At the maximum solar PV generating capacity allowed by MVU, Phase 1 buildings could provide up to 300 kW (one-half the 600 kW minimum daytime electric load) and Phase 2 buildings could provide up to 800 kW (one-half the 1,600 kW minimum daytime electric load). This would generate approximately 512,275 kWh/yr and 1,366,400 kWh/yr per building for Phase 1 and Phase 2, respectively, which is more than sufficient to power 100% of the office energy needs.

4.17.3.4 Technology Advancement

Section 15144 of the CEQA Guidelines states "*Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can*." This essentially limits the requirement for forecasting to that which could be reasonably expected under the circumstances and is part of the effort to provide a general "rule of reason" for EIR contents. The following discussion, in conjunction with the regulatory drivers listed above, seeks to establish what is reasonably foreseeable with respect to technology advancements that may influence transportation energy use contemporaneous with development of the WLC project.

As spelled out in the California Energy Efficiency Strategic Plan, the state has ambitious goals for the development of zero net energy (ZNE) buildings (zero net energy consumption), including a goal for all new commercial construction to be ZNE by 2030. Most zero-energy buildings rely on the electrical grid during times when local demand exceeds supply, and return the same amount of power or more at other times. Some ZNE buildings utilize on-site energy storage and are thus independent of the grid. ZNE buildings usually harvest some amount of energy on-site using technologies like solar and wind, while reducing the overall use of energy with highly efficient HVAC and lighting technologies.

The ZNE goal for commercial buildings is becoming more practical as the costs of alternative energy technologies decrease, grids become "smarter" and the costs of traditional fossil fuels increase. As pointed out by the California Public Utilities Commission (CPUC) in their draft *Commercial ZNE Action Plan* (CPUC, 2017), the current commercial ZNE market is extremely small, with approximately 190 currently verified or designed ZNE commercial buildings in California, but is positioned to grow. As described in Section 4.17.5 *Project Design Features,* future updates to the Title 24 building standards are expected to require ZNE commercial buildings by the year 2030. By proactively embracing an all-electric building design and committing to solar-ready roof construction, WLC would be net-zero-ready and in a stronger position for compliance with future Title 24 updates.

Zero emission vehicle (ZEV) technology is developing rapidly for both light-duty and heavy-duty vehicles. ZEVs can be powered by grid electricity stored in a battery, by electricity produced onboard the vehicle through a fuel cell, or through electricity provided by sources outside the vehicle such as overhead catenary wires that are currently used for light rail and some transit buses. ZEVs achieve zero tailpipe emissions by utilizing electric drive to power the vehicle instead of fuel combustion, and achieve higher system efficiency compared to fossil fuel powered vehicles. Additionally, Low Carbon Fuels, such as biodiesel and natural gas, have achieved relatively high rates of market penetration in some specific commercial applications, such as fleet delivery trucks, public buses, and waste hauling.

Because the project is proposed to be developed over a long period of time, the assessment of future energy demand by fuel type may consider likely achievements related to the development and improvement of technologies to reduce or displace traditional fossil fuel energy consumption. The following scenarios were developed in the WLC Transportation Energy Technical Report (ESA, 2018) based on varying degrees of electric vehicles projected to be in use at the time of the project's Phase 1 development in 2025 and full buildout in 2040 and their effects on overall project energy use. These scenarios form the basis for considering the project's potential impacts to energy consumption and generation in Section 4.17.7 Impacts Analysis:

Vehicle Scenario A: Low EV Penetration

Scenario A reflects the vehicle technology assumptions built into the EMFAC model that is the standard for use in CEQA analysis to calculate emission rates from motor vehicles operating on highways, freeways and local roads in California. It also reflects the requirements of current state building code, which stipulates that 6 percent of parking spaces be constructed to accommodate the future installation of EV charging stations (see Table 4.17-1). This scenario assumes no increase in the stringency of the construction requirement, as any change in the regulatory minimums would be purely speculative at this time. Scenario A also assumes that charging stations would be installed for charging passenger vehicles, and that there would be no charging of light duty truck EVs (or any other size trucks). The number of EV stations needed for 2025 and 2040 were determined using the following data and assumptions.

Table 4.17-1: EV Charging Station Requirements at WLC

Stage of Development	WLC WAREHOUSE BUILDINGS			WLC PARKING REQUREMENTS		
	Total Bldg SF	Avg Bldg SF (approximate)	# Bldgs	Avg per Bldg	WLC Total	EV Charging Equipped (6%)
Phase 1 - 2025	22,946,000	1,500,000	15.3	584	8,781	527
Full build out - 2040	40,600,000	1,500,000	27.1	575	15,536	932

For determining the breakdown of vehicle types and fuels powering the fleet, Scenario A relies on EMFAC 2014, which forecasts a statewide EV population of 1.08 million zero emission passenger vehicles by 2025 (4.6% of total) and 3.14 million by 2040 (10.5%).[12] For the South Coast Air Basin, the EMFAC 2014 forecasts very similar percentages of passenger EV populations at 4.6% by 2025 and 10.5% by 2040. Using these figures for the South Coast Air Basin, the number of passenger EVs estimated to access the project site daily under Scenario A were determined to be 533 for Phase 1 (2025) and 2,058 for full build-out in 2040. For Phase 1 under Scenario A there would be approximately the same number of parking spaces pre-constructed for installing EV charging stations as there would

[12] As interpreted by the project traffic modeling, passenger vehicles include all Light Duty Automobile (LDA) and Light Duty Truck (LDT) category vehicles in EMFAC

be EVs visiting the site each day. At full buildout, the number of EVs expected each day would be approximately double the parking spaces pre-constructed for charging stations.

Scenario A energy demand calculations assume that passenger EVs would have an average battery size of 100 kWh in the year 2025, equating to an average charge capacity of 80 kWh (80 %). Passenger cars in 2040 would have an average battery size of 200 kWh, equating to an average charge capacity of 160 kWh (80 %).

Scenario A assumes that half of the passenger EV population on site each day would charge their batteries to full capacity. If Level 2 AC chargers with a minimum charging rate of 19.2 kW (highest rate currently available) were provided, it would take approximately 4 hours to fully charge a vehicle with a 100 kWh battery. If the site was served by DC power blocks that spread the power delivery across multiple vehicles simultaneously in response to site energy management requirements, the charging time could be much faster. DC power blocks provide power at up to 500 kW, but it is reasonable to assume an average charging rate would be 100 kW, resulting in a charging time of approximately 48 minutes for a vehicle with a 100 kWh battery. At that rate, 932 charging stations at full buildout could charge thousands of vehicles per day, assuming vehicles move in and out of the EV charging parking spaces throughout the day.

Peak electricity loads for servicing the EVs were provided by WSP in their World Logistics Center *Comparison of Renewable Energy Technologies* report (WSP, 2018).[13]

Vehicle Scenario B: Medium EV Penetration (Scoping Plan Scenario)

This scenario reflects the same assumption regarding electric vehicle charging infrastructure as used in Scenario A (EV charging stations will be installed at 6 percent of parking spaces by the completion of Phase 1) but with higher electric vehicle populations consistent with the goals of California's 2017 Scoping Plan Update and 2016 Mobile Source Strategy, which are both designed to enable statewide attainment of the SB 32 GHG Target of 40 percent below 1990 levels by 2030. For Scenario B, the higher numbers of EVs include passenger vehicles and light trucks, and result in a higher vehicle charging load for the project.

The passenger EV population estimates are aligned with Governor Brown's Executive Order calling for 1.5 million ZEVs by 2025 (5.8 percent of total passenger vehicles), and the Mobile Source Strategy calling for 4.2 million ZEVs by 2030 (16.1 percent of total passenger vehicles). The passenger EV population estimate for 2040 is based on the conservative assumption that the EV population increase from 2025 to 2030 due to the Mobile Source Strategy (448,000 more EVs per year than assumed by EMFAC 2014) continues after 2030 through the year 2040. Based on that rate, as described in the WLC Transportation Energy Technical Study, there would be approximately 8.7 million ZEVs in operation statewide by 2040 (29 percent of total). Assuming the passenger EV percentages would be the same in the South Coast Air Basin, the project would be visited by 659 passenger EVs per day by 2025 and 5,795 passenger EVs by 2040.

The light duty truck EV populations estimates for 2025 and 2040 were provided by CALSTART, based on CARB's *Proposed Fiscal Year 2017-18 Funding Plan for Clean Transportation Incentives*,[14] and CALSTART's analysis of existing and potential regulations related to zero emission trucks (for more details please refer to the *WLC Vehicle Energy Technology Report*). CALSTART's Zero Emission Transformation model was used as a basis in estimating that 10 percent of the light duty trucks will be

[13] As explained in the WSP report, peak EV charging rate was estimated by allocating the annual electricity consumption of EVs according to the building operating schedules. The resulting peak electric load imposed by EV charging is about 25% of the aggregate nameplate capacity of all charging stations. This result agrees quite well with industry expectations that charging blocks managed with automated 'smart' controls will reduce the coincident peak demand to 20-25% of the aggregate capacity of the individual charging stations.

[14] Available at: https://www.arb.ca.gov/msprog/aqip/fundplan/proposed_1718_funding_plan_final.pdf

electric by 2025 and that the population would grow to 25 percent by 2040. Scenario B assumes there would be no medium duty or heavy duty EV trucks associated with the project.

Charging loads for the light truck category were determined using the daily mileage estimates and average kWh/mile consumption for each vehicle category, using data from the U.S. Department of Energy's Alternative Fuels Data Center.[15]

Like Scenario A, Scenario B assumes that passenger EVs in 2025 would have an average battery size of 100 kWh, and by 2040 they would have an average battery size of 200 kWh. Due to the higher EV populations the demand for fast charging will be higher, and it is reasonably assumed that DC power blocks, which manage power delivery across multiple vehicles simultaneously in response to site energy requirements, would be the appropriate chargers at the site to handle the increased loads. Like Scenario A, it is assumed that the average charging rate for DC power block chargers would be 100 kW. At that rate a 200 kWh battery (160 kWh capacity) would take approximately 96 minutes to charge. 932 charging stations at full buildout could charge thousands of vehicles per day, assuming vehicles move in and out of the EV charging parking spaces throughout the day.

Peak electricity loads for servicing the EVs were provided by WSP in their World Logistics Center *Comparison of Renewable Energy Technologies* report (WSP, 2018).

Vehicle Scenario C: High EV Penetration

Scenario C is the same as Scenario B with respect to passenger and light truck EVs, but includes estimates for medium duty and heavy duty EV trucks based on CALSTART's zero-emission transformation model that takes into account how nascent zero emission solutions, namely technologies from the transit bus segment, evolve and transition into other medium- and heavy-duty categories. As with the light duty truck estimates, the projections take into account funding programs, sales trends, technology development, and upcoming regulations. In addition, the estimates consider regulatory and commercialization studies completed by CALSTART, including potential regulations related to zero emission drayage trucks and access by zero emission trucks to city centers.

CALSTART's zero emission transformation model indicates that 10 percent of medium-duty and 20 percent of heavy-duty trucks servicing the South Coast Air Basin could feasibly be EVs by 2025; by 2040, the forecasts indicate that 40 percent medium-duty and heavy-duty trucks could be EVs. Charging loads for the light truck category were determined using the daily mileage estimates and average kWh/mile consumption for each vehicle category, using data from the U.S. Department of Energy's Alternative Fuels Data Center.[16]

4.17.4 Thresholds of Significance

4.17.4.1 Appendix F of the State CEQA Guidelines

Appendix G of the State CEQA Guidelines does not provide specific thresholds for the evaluation of impacts related to energy resources. Appendix F of the CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that and EIR shall include a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

[15] https://www.afdc.energy.gov/
[16] https://www.afdc.energy.gov/

- A project would result in significant impacts with regard to energy use and consumption if it would cause wasteful, inefficient, and unnecessary consumption of energy. In accordance with Appendix F, the following criteria will be considered in determining whether this threshold of significance is met:

  1) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed (Appendix F Section II C-1).

  2) The effects of the project on local and regional energy supplies and on requirements for additional capacity (Appendix F Section II C-2).

  3) The effects of the project on peak and base period demands for electricity and other forms of energy (Appendix F Section II C-3).

  4) The effects of the project on energy resources (Appendix F Section II C-5).

  5) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives (Appendix F Section II C-6).

- A project would result in significant impacts with regard to energy use and consumption if it would require the construction of new electrical and/or natural gas facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.
- A project would result in significant impacts with regard to energy use and consumption if it would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. In accordance with Appendix F, the following criteria will be considered in determining whether this threshold of significance is met:

  1) The degree to which the project complies with existing energy standards (Appendix F Section II C-4).

4.17.5 Project Design Features

The WLCSP incorporates Project Design Features (PDFs) including sustainable development standards that minimize energy consumption, conserve water, and use recycled or sustainable building materials, where feasible. The WLCSP provides developers with a specific framework for identifying and implementing a variety of practicable and measurable green building measures into the design, construction, operations, and maintenance of each development. Pursuant to the WLCSP, all new development within the project site will be required to meet the California Building Energy Standards in effect at the time construction commences or be 10% more stringent than 2008 standards, whichever results in lowest energy use. In addition, WLC buildings will be designed to be "solar ready" (i.e., structural upgrades to allow the installation of solar photovoltaic systems on the roof of each building), and the WLCSP includes a commitment that the energy requirements of all office space will be supplied with rooftop solar energy systems.

Building Energy

As outlined in the WLCSP, the project will incorporate sustainable design features to save energy and reduce its environmental footprint, including but not limited to:

- Reduced water use for landscape irrigation,
- Street designs that harvest and channel runoff into landscape areas instead of storm drains,
- Accommodate the use of alternative means of transportation,
- Use recycled building materials to the extent feasible,

- Use local sources of building materials to the extent feasible,
- Support waste management reduction identified in AB 341.
- Minimize the use of impervious paved surfaces throughout the project,
- Incorporate on-site storm water capture and infiltration within landscape areas,
- Support alternative fuel use through the provision of an on-site alternative fueling site, and
- Provide for the use of roof-mounted solar systems or other alternative power systems.

The WLCSP specifies that all buildings of at least 500,000 square feet (representing more than 99 percent of total project square footage at buildout) shall be designed to meet or exceed the LEED Certified Building Standards and that buildings will be designed to accommodate renewable energy systems. The design of the WLC will pursue these goals by incorporating design features such as, but not limited to, the following:

Building Design and Construction Features:

- Construct “Solar ready” rooftops for buildings;
- Implement design and construction techniques will be employed to reduce the heat island effect, including the use of materials that have a low solar reflectance index such as white roofs and light-colored pavements;
- High performance glazing, overhangs, and landscaping to capture and control natural daylight;
- Use of atriums, skylights and internal courtyards to provide additional daylighting;
- Use of renewable materials and building materials with recycled content where feasible;
- Develop waste management plan and a comprehensive recycling and management program to divert at least 50 percent of waste from landfill, including storage and collection of recyclables, building and material reuse, and careful construction waste management;
- Incorporate the use of passive heating and cooling into the design or modification of the high-cube warehouse development (e.g., white building colors and roof insulation to minimize heat gain, and landscaping to help shade buildings);
- Install outdoor electric outlets to accommodate the use of electrical property maintenance equipment (Section 12.4 of the WLCSP);
- Install advanced irrigation systems, drought-tolerant plants, the use of mulch, recycled and other permissible alternative sources of water, and turfless plantings with decorative hardscape materials such as rock and other materials that do not require potable water sources.

Transportation Features:

- Accommodate alternate forms of transportation including, public transportation (bus), charging stations for electric cars, carpooling, and bicycles.
- Construct sidewalks and a multiuse trail for pedestrian circulation;
- Promote the riding of bicycles, through the provision of bike racks/storage, showers and changing rooms; and
- Design streets to accommodate bus service – Riverside Transit Agency (RTA) does not currently operate any routes in the immediate vicinity of the WLC. RTA will determine if and when bus service will be provided.

Solid Waste Diversion Features:

- Require that all development within the project provide enclosures or compactors for trash and recyclable materials per Specific Plan (Section 5.1.6).

In addition to the prescriptive Building Design and Construction Features, Transportation Features, and Solid Waste Diversion Features listed above, the Applicant commissioned the WLC *Comparison of Renewable Energy Technologies* report (WSP, 2018) to compare feasible, cost-effective renewable energy technologies that could be incorporated into the project design. The report evaluates additional project design options for the WLC that could improve energy performance and increase the use of renewable energy. The screening criteria used to evaluate feasibility include GHG emissions, resiliency, financial constraints, technical constraints, and regulatory constraints. Both on-site and off-site sources of renewable energy were considered.

As an overall strategy, the report recommends eliminating the need for natural gas in building systems and maximizing onsite renewable electricity generation to position the WLC to become an all-electric development that has the future potential to operate 100% on renewable electricity.[17]

Recognizing that energy efficiency is the least-cost sustainable energy resource available, the *Comparison of Renewable Energy Technologies* report recommends implementing all feasible and cost-effective energy conservation measures (ECMs) before determining the feasibility and cost-effectiveness of renewable energy supply options. In addition to reducing energy demand associated with the project, improving the energy efficiency of the buildings will reduce the additional electrical distribution capacity that must be built to supply the project, and help minimize expansion of the electricity distribution infrastructure (e.g., substation and transformer) and the associated local distribution capital costs. To that end, the report identifies feasible and cost-effective ECMs that go beyond the PDFs in the WLCSP and can further reduce building energy consumption beyond the minimum requirements of the current (2016) Title 24 energy code, and help achieve or exceed LEED Certified Building Standards. The ECMs address internal loads, such as lighting and equipment, as well as the energy required to provide heating, cooling, and domestic hot water. Key ECMs in the recommended package that go beyond the PDFs in the WLCSP are variable refrigerant flow (VRF) heat pumps providing heating and cooling to the office spaces, direct evaporative cooling as the first cooling stage and VRF as the supplemental cooling stage for air-conditioned warehouse spaces, LED lighting throughout the offices and warehouses, and LED exterior and parking lot lighting. If fully implemented by the project, the ECMs in combination with the WLCSP PDFs are expected to deliver energy performance that exceeds the current minimum Title 24 requirements by approximately 17 percent at Phase 1 and 16 percent at full buildout:

Building Envelope:

- Optimal Vertical Fenestration Construction
- Optimal Skylight Construction
- Optimal Window to Wall Ratio
- Optimal Skylight to Roof Ratio

Exterior Loads:

- LED exterior lighting
- Daylight sensor based exterior lighting

Internal Equipment Loads:

- Automatic Receptacle Control

[17] The State of California is expected to require net-zero energy (ZNE) buildings in future updates to Title 24 building standards. By proactively embracing an all-electric building design and committing to solar-ready roof construction, WLC would be net-zero-ready and in a stronger position for compliance with future Title 24 updates.

- Highest Efficiency Office Equipment
- Highest Efficiency Other Internal Loads

Lighting:

- Multi-Level Switching
- High Performance Lighting (LED)
- Use separate controls for lighting areas near windows
- Occupant sensors

Daylighting:

- High-on-wall continuous daylighting windows/clerestory windows
- Optimal Daylighting Control
- Dimming daylight controls

HVAC:

- Thermostat setback/setup
- Shut off outdoor air and exhaust air dampers during unoccupied periods
- Supply air temperature reset
- High Performance Fans
- Variable Speed Fans
- High efficiency pumps
- Variable Speed Pump motors
- Reduce service water consumption
- Efficient service water pumping
- Integrated and optimized air side economizer
- Direct Evaporative Cooling
- Variable refrigerant flow heat pump & cooling
- Dedicated Outside Air System Ventilation with Heat Recovery
- Demand controlled ventilation/CO2 controls

On-Site Renewable Energy

The WLC Specific Plan commits the WLC project to meeting the annual energy requirements of all office spaces with PV, thereby effectively achieving net-zero energy (NZE) office operations. The *Comparison of Renewable Energy Technologies* report estimates that the offices in each typical WLC building would consume about 474,120 kWh/yr in Phase 1 and experience a peak electric demand of about 280 kW. At buildout, the offices in each building would consume about 417,230 kWh/yr and experience a peak demand of about 270 kW. The report also found that the maximum allowed amount of PV capacity/building in Phase 1 (300 kW) will generate about 512,275 kWh/yr at the WLC location. The maximum allowed amount of PV capacity/building at buildout (800 kW) will generate about 1,366,400 kWh/yr. These maximum allowed PV capacities are sufficient in both Phase 1 and buildout to satisfy 100% of the office energy needs, thereby meeting the NZE objective for WLC office space.

A system that combines PV with battery storage of excess solar generation was considered, but the MVU solar sizing limitations and the estimated WLC project demands do not result in excess solar generation that could be used to charge a battery. In addition, MVU's Time-of-Use rate structure is not compatible with the project's peak electrical usage (load curve) making the use of batteries to deliver any meaningful reduction an unviable option.

Considering the air emissions constraints, MVU rate structures, project electric load curves, and MVU PV sizing rules, rooftop PV systems without energy storage were determined to be the project's best sustainable clean energy supply option. The use of PV in each phase of the WLC project would cover both the peak electric load generated by the offices and the annual energy usage of the offices. Utilizing the maximum permitted amount of rooftop PV would enable the project office spaces to achieve effectively ZNE operations. Project Design Features include roofs with the structural integrity that can accommodate the possibility of future solar installation over the entire roof of each building. At a minimum, the project will install enough solar power in both phases to meet energy needs of the project's office spaces.

The *Comparison of Renewable Energy Technologies* report found that the use of on-site battery storage and vehicle-to-grid (V2G) technology[18] are not viable under current regulatory and economic conditions. MVU currently has no policies or rules that would allow WLC to use battery storage to increase usage of solar electricity. V2G technology is not yet commercialized, and MVU rules and rate structures would need to change to accommodate V2G technology and to incentivize EV owners to make their vehicle's batteries available while the vehicle is parked.

Off-Site Renewable Energy Procurement

While WLC tenants are expected to purchase electricity from MVU, there are multiple off-site renewable electricity procurement options available to them, if they are willing to incur the associated price premium. Understanding the risk profiles, market credibility, and regulatory implications of different renewable energy procurement options is paramount to making an informed decision. WSP evaluated the following options:

- Unbundled renewable energy certificates (RECs);
- Power purchase agreements (PPAs);
- Community choice aggregation (CCA);
- Green tariffs.

There is no one-size-fits-all recommendation for WLC tenant procurement of off-site renewable energy. Each tenant's circumstances are likely to be unique, so the best off-site procurement option for one tenant may very well not be the best option for another tenant.

To meet the Project Objectives and the City's Economic Development Objectives (see Section 1.3.1 of the WLC Specific Plan), WLC must establish and maintain a competitive position in the marketplace. The price premium associated with off-site renewable energy procurement would increase WLC tenant utility costs and thus run counter to the Project Objectives and the City's Economic Development Objectives. It would therefore be counterproductive to require WLC tenants to procure renewable energy from off-site sources. For these reasons, the concept of requiring a tenant to procure off-site renewable energy was not considered a viable sustainable supply option to impose on the project.

[18] A V2G system uses the on-board battery packs of parked electric vehicles as distributed energy resources to store electricity for use during peak electricity demand periods. In the future, it is expected that smart controls on EV charging stations will enable each EV owner to decide whether or not to allow V2G charging and discharging of the EV's battery pack.

Transportation Energy

For transportation energy, the *Transportation Energy Technical Study* (ESA, 2018) was conducted to compare feasible, cost-effective options for integrating the use of renewable energy and improving the overall energy performance of transportation operations associated with the WLC project. The Transportation *Energy Technical Study* considered a wide range of fuel and vehicle options across all vehicle classes, and assessed feasibility based on applicability to the project, relative cost, commercial readiness, funding availability, policy and regulatory support, potential industry partners, and other factors.

The *Transportation Energy Technical Study* found that zero emission vehicle (ZEV) technology is steadily developing for both light-duty and heavy-duty vehicles, driven by both regulatory developments and market forces. ZEVs encompass a range of technologies including battery electric vehicles (BEVs), hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and range extended electric vehicles (REEVs) that utilize a fuel cell as an additional energy source. As outlined in the *Transportation Energy Technical Study* and summarized in the Vehicle Scenarios above, commercialization of passenger vehicles is occurring rapidly. A significant population of passenger EVs is expected at the site by Phase 1 (2025) and that number will increase substantially by full buildout of the project (2040), representing a potential significant demand for on-site charging. The study also found that development of electric medium- or heavy-duty vehicles is still in the pilot or demonstration phase and it is not possible to predict when they will become commercially available.

Although it is speculative to state what the regional fleet mix will be as each phase of the project is completed, and the adoption of ZEVs by WLC employees and customers will be beyond the direct control of the WLC, all EV types should be anticipated in planning for the onsite charging infrastructure. To that end, the project will construct the WLC parking areas with cable raceways for installing future EV charging stations, which will enable WLC to more readily and cost effectively provide this service to future tenants if and when demand dictates.

4.17.6 Mitigation Measures

In addition to the PDFs regarding energy conservation and renewable energy, the Revised Sections of the FEIR include the following mitigation measures for other environmental impacts that reduce potential impacts of the WLC project relative to energy use. The complete mitigation measures below can be found in the Executive Summary.

Air Quality Mitigation Measure 4.3.6.2A (construction fuel) would require that construction equipment greater than 50 horsepower be USEPA Tier 4 emissions compliant and limits on-site idling of all diesel-powered construction equipment, delivery vehicles, and delivery trucks to three minutes in any one hour.

AQ Mitigation Measure 4.3.6.3B (long haul trucks). Require model year 2010 medium-heavy duty and heavy-heavy duty trucks or later.

AQ Mitigation Measure 4.3.6.4A: Includes several measures related to bicycle and pedestrian facilities and infrastructure, electric vehicle infrastructure, and ridesharing as conditions to any Plot Plan approval within the WLC site.

Utilities Mitigation Measure 4.16.1.6.1A would reduce outdoor water usage which in turn reduces energy use associated with the conveyance of that water.

Utilities Mitigation Measure 4.16.1.6.1B would reduce interior water usage, including low flow fittings, fixtures and equipment.

Utilities Mitigation Measure 4.16.1.6.1C would allow reclaimed water to be used for irrigation.

Greenhouse Gas Mitigation Measure 4.7.6.1A (waste diversion). Recycling and composting availability and reduce operational waste by at least 50 percent before 2020 and 75 percent after.

Greenhouse Gas Mitigation Measure 4.7.6.1B (Previously Included as Utilities Mitigation Measure 4.16.4.6.1A for building energy). Each application for a building permit shall include energy calculations to demonstrate compliance with California Energy Efficiency Standards (Title 24, Part 6).

Greenhouse Gas Mitigation Measure 4.7.6.1C (Previously Included as Utilities Mitigation Measure 4.16.4.6.1B building energy). Prior to the issuance of any building permits within the WLC site, each project developer shall submit energy calculations used to demonstrate compliance with the performance approach to the California Energy Efficiency Standards, for each new structure.

Greenhouse Gas Mitigation Measure 4.7.6.1D (Previously Included as Utilities Mitigation Measure 4.16.4.6.1C building energy; now modified). Prior to the issuance of a building permit, new development shall demonstrate that each building has implemented the following:

- Install solar panels with a capacity equal to the peak daily demand for the ancillary office uses in each warehouse building or up to the limit allowed by MVU's restriction on distributed solar PV connecting to their grid, whichever is greater;
- Increase efficiency for buildings by implementing either 10 percent over the 2008 Title 24's energy saving requirements or the Title 24 requirements in place at the time the building permit is approved, whichever is more stringent; and
- Require the equivalent of "Leadership in Energy and Environmental Design Certified" for the buildings constructed at the World Logistics Center based on Leadership in Energy and Environmental Design Certified standards in effect at the time of project approval.

4.17.7 Less than Significant Impacts

4.17.7.1 Energy Consumption and Generation

Threshold	Would the proposed project result in energy use and consumption that would cause wasteful, inefficient, and unnecessary consumption of energy?

4.17.7.1.1 Construction

Electricity

Electrical power would be consumed to construct the project. Electricity would be supplied by MVU, with electrical service extended to specific construction sites from existing infrastructure throughout the WLC site area, as warranted. Specifically, construction offices and security lighting are expected to be powered by MVU- provided electricity. However, diesel powered generators are expected to be used to power tools in remote portions of the construction sites (diesel use discussed below). The City's noise ordinance generally restricts construction during nighttime hours (See Section 4.12.3, the City of Moreno Valley Noise Ordinance as well as Section 4.12, *Noise*, in the Revised Sections of the FEIR), which would minimize the need for nighttime lighting.

However, on-site construction activities are expected to occur outside of the allowed construction hours specified in the City of Moreno Valley Noise Ordinance. The operation of each piece of off-road equipment within the on-site construction areas (i.e., Plots 1 through 22) would not be constant throughout the day, as equipment would be turned off when not in use. Most of the time over a typical work day, the equipment would be operating at different locations within the various plots of the project site and would be largely intermittent. Should 24-hour concrete pouring occur, the project would use light carts powered by diesel to illuminate pouring areas. The light carts used for continuous pouring

are included in the construction transportation energy analysis below.

The project would require electricity for water conveyance during ground-moving activities. The project site spans 2,600+ acres and would require a relatively large amount of water to cover the affected construction areas. Electrical consumption due to the conveyance of water used for dust control is presented in **Table 4.17-2**, below.

Table 4.17-2: WLC Project Construction Electricity Use

Source	Electricity (MWh per year)
Water Conveyance from Dust Control and Grading (Annual Average over 15-16 year construction period)[b]	1,496
2020 MVU Electricity Sales (MVU 2016)	**312,786**
% of MVU Electricity Usage	**0.48%**

SOURCE: ESA 2018; MVU 2016
NOTES:

[a] Moreno Valley Utility, 2015/16 Annual Report (2016). Available at: http://www.moreno-valley.ca.us/resident_services/utilities/pdfs/mvuAnnualReport0217.pdf. Accessed April 2018.
[b] Derived from estimated construction water use in CalEEMod runs from 2015 FEIR.

Water use related to dust control is regulated under SCAQMD's Rules 402 and 403 and is required to limit fugitive particulate matter generated by construction activities. The project would be in compliance with Rules 402 and 403 and would require a relatively large amount of water to cover the entire acreage of the project site. However, the expected electricity consumption associated with water use equates to only 0.48 percent of MVU's forecasted sales for 2020 (expected starting year of construction).

The electrical demand would vary throughout the construction period based on the construction activities being conducted. Additionally, when not in use, electrical equipment would be powered off to avoid unnecessary energy consumption.

Therefore, since electricity from water conveyance represents a relatively negligible percentage of total electricity use, and night construction activities would be intermittent and would not require electricity, construction activities would not result in the wasteful, inefficient, and unnecessary consumption of electricity, and impacts would be less than significant.

Natural Gas

Natural gas is not expected to be consumed in any substantial quantities during construction of the WLC project. Therefore, related to the consumption of natural gas during construction, the project would have no impact.

Transportation Energy

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors from the OFFROAD model. On-road equipment would include trucks to haul material to and from the project site, vendor trucks to deliver supplies necessary for project construction, and fuel used for construction worker commute trips. A summary of the annual fuel consumption during construction of the project is provided in **Table 4.17-3**, *WLC Project Construction Fuel Usage*. As shown in Table 4.17-3, on- and off-road vehicles would consume an estimated annual average of 1,375,582 gallons of diesel fuel and 36,139 gallons of gasoline for each year of project construction.

Table 4.17-3: WLC Project Construction Fuel Usage

Source	Diesel Fuel (gallons per year)	Gasoline Fuel (gallons per year)
Construction:		
Heavy-Duty Construction Equipment	1,212,964	—
Haul Trucks	94,155	—
Vendor Trucks	68,463	—
Worker Trips	—	36,169
Annual Average (approximately up to a 15-16 year construction duration)	**1,375,582**	**36,169**
2016 Riverside County Fuel Sales (CEC 2016)	**273,000,000[a]**	**1,035,000,000[b]**
% of County Usage	**0.50%**	**0.0035%**

SOURCE: ESA 2018; CEC 2016

NOTES:

[a] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

[b] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

Compliance with the anti-idling regulation and the use of cleaner, more energy efficiency construction equipment would reduce the project's annual average diesel fuel usage. As discussed previously, construction of the project would utilize fuel efficient equipment consistent with state and federal regulations, and would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. While these regulations are intended to reduce construction emissions, compliance with them would also result in energy savings.

In addition, the project would implement a construction waste management plan to divert 50 percent of mixed construction and demolition debris to City certified construction and demolition waste processors, consistent with the AB 341. Implementation of the construction waste management plan will likely reduce truck trips to landfills and/or material recovery facilities and increase the amount recycling and reuse of materials.

Based on the available data, construction would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the project site. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and thus result in the efficient use of the project's construction-related energy.

Construction of the WLC project would benefit from California's Pavley/ACC standards that are designed to result in more efficient use of transportation fuels, because they would affect the vehicles used by workers and any light duty trucks used by vendors or haulers. These vehicle efficiency standards are the most stringent in the nation and among the most stringent in the world. In addition, the project would reduce fuel use by requiring that construction equipment greater than 50 horsepower be USEPA Tier 4 emissions compliant and by limiting on-site idling of all diesel-powered construction equipment, delivery vehicles, and delivery trucks to three minutes in any one hour, as specified in Mitigation Measure 4.3.6.2A.

As shown in Tables 4.17-3 above, transportation fuel usage during construction represents approximately 0.0035 percent of annual gasoline usage and 0.50 percent of annual diesel usage within Riverside County, respectively, representing a small fraction of the County's total fuel demand. In conjunction with California's stringent vehicle efficiency standards, the project would not result in the wasteful, inefficient, and unnecessary consumption of energy.

4.17.7.1.2 Operation

Electricity

The WLC project would increase demand for electricity due to consumption by buildings, water supply and conveyance, and EV charging. The project's operational electricity demand was estimated for Phase 1 and Full Buildout by considering a Baseline scenario (minimum Title 24 compliance) and three project scenarios based on the Electric Vehicle Scenarios presented earlier. The project scenarios (Low, Medium, and High EV Penetration) all incorporate the energy conservation PDFs. The following assumptions were incorporated into the scenarios:

- The Title 24 Baseline scenario is based on the project's annual energy use being in minimum compliance with Title 24, including the Title 24 Part 6 requirement for the building energy efficiency and the Part 11 requirement that 6 percent of employee and visitor parking spaces be constructed to accommodate electric vehicle supply equipment (EVSE) for future electric vehicle charging. The Baseline scenario assumes that EV charging stations will be installed at 6 percent of the parking spaces by the time the project becomes operational.

- The project incorporates the Energy Conservation Measures (ECMs) from the WLC *Comparison of Renewable Energy Technologies* report[19] that would enable the project to exceed Title 24 energy standards by approximately 17 percent at Phase 1 and 16 percent at full buildout. As with the Title 24 Baseline Scenario, the project also assumes that EV charging stations will be installed at 6 percent of the parking spaces by the time the project becomes operational.

- The project implements the commitment to install rooftop solar PV generation designed so as to produce an amount of electricity equal to the power needs for the projected ancillary office portion of the warehouse buildings or up to the limit allowed by MVU's restriction on distributed solar PV connecting to the grid, whichever is greater.

The project's estimated operational electricity demand is provided in **Table 4.17-4**, *WLC Project Operational Electricity Usage* the for the Title 24 Baseline Scenario and the three Electric Vehicle Scenarios.

As discussed above and shown on Table 4.17-4, the project implements commitments and strategies to lower electricity consumption needed for buildings (e.g. lighting, cooling, power equipment, and water conveyance). In 2025, electrical demand will be lowered with implementation of sustainability measures such as high efficiency lighting and appliances, skylights, and motion sensors, etc. As discussed above, the project would comply with and exceed the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance and buildings over 500,000 sf (representing more than 99 percent of total project square footage at buildout) will be LEED certified. Reliance on grid-supplied power is further offset by the generation of 12 MW of power through on-site rooftop solar PV. Thus, the Project + Low EV Penetration (Scenario A) uses approximately 14 percent less electricity than the baseline demand scenario. In 2040, the Project + Low EV Penetration Scenario would use approximately 15 percent less electricity than the 2040 Baseline Scenario.

Although the Project + Medium EV Penetration Scenario would require more power than the Project + Low EV Penetration Scenario, the net electrical demand on MVU would still be 12 percent less than the Baseline Scenario for 2025 due to the ECMs and on-site solar PV generation. For 2040, electricity use would be 15 percent more than the Baseline Scenario due to the much higher EV penetration rates for light duty passenger cars consistent with the 2016 Mobile Source Strategy.

[19] Referred to as Energy Conservation Measures (ECMs) in the *Comparison of Renewable Energy Technologies* report.

Table 4.17-4 WLC Project Operational Electricity Usage

Source	Phase 1 - 2025 (MWh/yr)	Full Buildout - 2040 (MWh/yr)
MVU Electricity Forecast Sales (2024)[a b c]	**352,044**	**-**
Title 24 Baseline Scenario		
Building annual electricity [d]	194,287	330,649
EV charging annual electricity [e]	7,775	60,116
Total	**202,062**	**390,765**
% of MVU Forecast	**57%**	**-**
Project + Low EV Penetration (Scenario A)		
Building annual electricity [d]	174,423	298,084
EV charging annual electricity [e]	7,775	60,116
Electricity Savings from Solar PV [f]	-7,686	-24,083
Total	**174,512**	**334,117**
Change from Baseline	-27,550	-56,648
% Change from Baseline	**-14%**	**-15%**
% of MVU Forecast	**50%**	**-**
Project + Medium EV Penetration (Scenario B)		
Building annual electricity [d]	174,423	298,084
EV charging annual electricity [e]	10,687	174,279
Electricity Savings from Solar PV [f]	-7,686	-24,083
Total	**177,424**	**448,280**
Change from Baseline	-24,638	+57,515
% Change from Baseline	**-12%**	**+15%**
% of MVU Forecast	**50%**	**-**
Project + High EV Penetration (Scenario C)		
Building annual electricity [d]	174,423	298,084
EV charging annual electricity [e]	96,619	485,017
Electricity Savings from Solar PV [f]	-7,686	-24,083
Total	**263,356**	**759,018**
Change from Baseline	**+61,294**	**+368,253**
% Change from Baseline	**+30%**	**+94%**
% of MVU Forecast	**75%**	**-**

NOTES:

Scenario A through C's building energy is different from the baseline due to Project Design Features that exceed Title 24 energy standards. The baseline scenario complies with but does not exceed standards.

[a] Moreno Valley Utility, 2015 Integrated Resource Plan, March 2015.

[b] Electricity sales forecasts only available up to 2024 in MVU's IRP.

[c] Since MVU's forecast only extends until 2024, it is not possible to adequately estimate electricity use in 2040 and compare to future project use.

[d] Source: Evans, 2018; electricity consumption numbers estimated by WSP, as communicated by email (subject: WSP draft inputs – Building electricity) from Evan Evans to Jeff Caton on June 29, 2018.

[e] Source: ESA and CALSTART, 2018

[f] Source: WSP, 2018

In the Project + High EV Penetration Scenario, total electrical demand driven by populations of EV trucks would exceed total electrical demand in the Baseline Scenarios for 2025 and 2040; however, a substantial reduction in the use of liquid transportation fuels (diesel and gasoline) would also be expected (see discussion below). Replacing VMT powered by the combustion of diesel and gasoline fuels with EV-generated VMT, especially as electricity becomes less GHG-intensive under the State's RPS, has the added advantage, or co-benefit, of reducing the emission of harmful air pollutants such as particulate matter (PM) and oxide of nitrogen (NOx) associated with transportation.

The feasibility of using medium and heavy duty EVs for delivery of goods to or from the WLC is, to a great extent, dependent on the nature of the warehousing operations. For example, many warehouses implement the "drop and drag" procedure, where a truck will bring goods to the facility, and the trailer (or sea-going cargo container) will be disconnected and left on-site for the lengthy process of unloading. An empty trailer may be connected and the truck quickly departs to return to its point of origin. Conversely, an out-bound truck is usually scheduled to retrieve a delivery load only once the container/trailer is full. Thus, trucks are not on-site or idle for long enough times to obtain a meaningful battery charge. Medium-duty and heavy-duty zero emission trucks are in the very early stages of commercially market deployment and currently cost substantially more than conventionally fueled trucks, and current funding assistance programs do not fully offset that cost difference (ESA and CALSTART, 2018). Given that the future tenants of the WLC are not known and cannot be identified at this time, it would be speculative to assume the High EV Penetration Scenario would be practicable or feasible by 2025 or by 2040.

In regard to forecasting, such as done with EV penetration rates to generate the scenarios evaluated, the *Laurel Heights* Court commented that an agency is required to forecast only to the extent that an activity could be reasonably expected under the circumstances. The Court recognizes that an agency cannot be expected to predict the future course of governmental regulation or exactly what information scientific advances may ultimately reveal. *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal. 3d 376. Therefore, in light of the changes to market and regulatory drivers that would have to occur to make medium and heavy duty EVs widely implemented and feasible by 2025 or 2040 to the now unknown future tenants of the WLC, the potential for the electrical demand projected under the Project + High EV Penetration Scenario to materialize is highly speculative. CEQA Guidelines Section 15145 advise "*If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact*." Therefore, any effects to energy resources from achieving the Project + High EV Penetration Scenario would be highly speculative, and associated analyses are presented herein for informational purposes only.

MVU forecasts that its peak demand in 2024, the furthest forecasted year in its 2015 IRP, would be approximately 352,044 MWh per year.[20] This is approximately 90 percent higher than the 185,000 MWh that MVU sold to all customers in its area for the 2015-2016 fiscal year. As shown in Table 4.17-4, the WLC project's estimated electrical consumption would account for between 50 and 75 percent of MVU's projected electricity projected sales depending on the EV penetration scenario for Phase 1 (2025). However, MVU's 2015 IRP anticipates growth in the region and specifically considers the electrical demand generated by the project. The IRP states that a portion of the WLC project's demand is incorporated into forecasted growth and MVU will monitor the development progress of the project. Therefore, it is reasonable to assume that MVU's existing and planned electricity supplies could support the project's electricity demand calculated for the Project + Low EV Penetration (Scenario A) and the Project + Medium EV Penetration (Scenario B) by 2025. Any determination of MVU's need for additional capacity beyond what is planned would be speculative and depend on the cumulative demand within MVU's service area.

As stated above, effects attributable to the Project + High EV Penetration Scenarios would be highly speculative, and could be as much as 75 percent of MVU's projected forecast sales in 2024. Since the 2015 IRP only forecasts out to 2024, projecting MVU's electricity use and supply for the full buildout 2040 Scenarios would also be highly speculative. MVU has a considerable amount of time to procure energy resources in anticipation of the project's development, and has committed to taking the WLC project's needs into consideration in future IRP development.

Based on MVU's forecasts, the peak demand for their power grid in 2024 will be 79 MW.[21] The project's annual peak demand from buildings is expected to be 34.9 MW in 2025 and 58.2 MW in 2040, as shown in Table 4.17-5, below. For the Low and Medium EV Penetration Scenarios, the total peak demand

[20] Moreno Valley Utility, 2015 Integrated Resource Plan, March 2015.
[21] Moreno Valley Utility, 2015 Integrated Resource Plan, March 2015,

including EV loads could be 36 MW and 36.5 MW for 2025, respectively. By the year 2040, the annual peak demand for the Low and Medium EV Penetration Scenarios could total 67.3 KW and 84.6 KW, respectively. However, as stated above, forecasting project peak demand and MVU's peak demand for 2040 is highly speculative and would depend on cumulative demand. The peak demand for 2040 is included for informational purposes.

Table 4.17-5: WLC Project Annual Peak Demand

Source	Peak Demand (MW)	
	2025	2040
Building Demand	34.9	58.2
Scenario A Low EV Penetration	1.1	9.1
Total	**36.0**	**67.3**
Building Demand	34.9	58.2
Scenario B Medium EV Penetration	1.6	26.4
Total	**36.5**	**84.6**
Building Demand	34.9	58.2
Scenario C High EV Penetration	14.6	73.4
Total	**49.5**	**131.6**

SOURCE: WSP 2018 and ESA 2018

MVU's electrical generation is derived from a mix of non-renewable and renewable sources such as coal, natural gas, solar, geothermal, wind, and hydropower. MVU's 2015 Power Integrated Resources Plan identifies adequate resources to support future generation capacity, and a new 112 kV substation is proposed to be constructed within the WLC site. With regard to renewable energy sources, the project would use electricity provided by MVU, which MVU is required to meet the 2050 RPS. MVU's current source of renewable resources include wind, solar, and hydroelectric and account for 17 percent of MVU's overall energy mix for 2016 (the most current year data is available for).[22] The project itself is incorporating renewable energy sources with a minimum of 14.1 MW of rooftop solar at buildout to achieve a net-zero energy use for the estimated office demands. At full build-out WLC will feature the equivalent of twenty-seven 60,000 square-foot net-zero office buildings. To put this in context, the entire State of California has about 190 net-zero commercial buildings that are currently verified or designed as of 2017 (CPUC, 2017). This solar commitment would be within the solar PV limitations set by MVU.

In addition to the solar commitment the WLC project would implement energy performance improvement measures to exceed the current minimum Title 24 requirements by approximately 17 percent at Phase 1 and 16 percent improvement at full buildout. Although the project would result in moderate increases in annual electrical demand compared to MVU's current supply, for the low and medium EV penetration scenarios, MVU is committed to meeting the project's electricity demand through a future IRP update and planning process. Therefore, with the incorporation of these features, operation of the project would not result in the wasteful, inefficient, or unnecessary consumption of electricity, would not cause a need for additional capacity regionally or locally, and would not affect electricity resources to the extent that electricity demand can reasonably be projected and assessed.

Building Natural Gas

The WLC project could increase the demand for natural gas resources through the project's commitment to a CNG/LNG fueling station,[23] but the project's operational natural gas demand from buildings is expected to be zero, as shown in Table 4.17-6. The project would mostly comprise high-cube warehouses that do not require heating from natural gas. The spaces that do require heating are ancillary office spaces. Because all heating and cooling is provided via direct evaporative cooling and heat pumps, natural gas is not required. This allows the project to reduce on-site fossil fuel combustion

[22] California Energy Commission, Utility Annual Power Content Labels for 2016. http://www.energy.ca.gov/pcl/labels/. Accessed February 2018.

[23] For natural gas use from CNG/LNG fueling station, see discussion under Transportation Energy, below.

that would normally be associated with service water and space heating. The Title 24 Baseline scenario assumes compliance but not exceedance of energy standards and includes annual natural gas use equating to 51,274 MMBtu in 2025 and 84,771 MMBtu in 2040. As such, the project would result in a 100 percent decrease in consumption of natural gas from the Title 24 Baseline scenario for both Phase 1 and Full Buildout.

Table 4.17-6: WLC Project Operational Natural Gas Usage in Buildings

Source	Phase 1 - 2025 (MMBtu/yr)	Full Buildout - 2040 (MMBtu/yr)
SoCal Gas (2016)[a]	304,290	304,290
Title 24 Baseline Scenario:		
Building annual natural gas	51,274	84,771
% of SoCal Gas	**17%**	**28%**
All-Electric Project:		
Building annual natural gas	0	0
% of SoCal Gas	**0%**	**0%**

NOTES:

[a] Total Sempra natural gas sales, from Sempra Energy, 2016 Annual Report, (2017). Available at: https://www.sempra.com/sites/default/files/microsites/2016_annualreport/. Accessed July 2018. Converted from 294 billion cubic feet and a conversion factor of 1,035 Btu per cubic foot based on USEIA data (see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, April 28, 2017. Available: https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed October 2017).

SOURCE: WSP 2018

Transportation Energy

Like operational electricity discussed above, the transportation energy usage was estimated for three EV penetration scenarios and for two different phases of development (Phase 1 and Full Buildout). In the context of transportation fuels, the Project + Low EV Penetration scenario represents the "baseline" scenario, as it assumes EV penetrations consistent with the EMFAC 2014 transportation model used in standard CEQA analysis. As explained in Section 4.17.3.3 *Technology Advancement*, the Medium EV Penetration and High EV Penetration Scenarios assume statewide attainment of the higher EV targets in the 2016 California Mobile Source Strategy or the 2017 Scoping Plan Update.

The WLC project's estimated operational transportation fuel demand is provided in Table 4.17-7. As discussed previously, the project would support statewide efforts to improve transportation energy efficiency and reduce fossil fuel consumption by private automobiles. The project would also include the installation of electric vehicle supply equipment (EVSE) pursuant to Title 24, part 6 of the CALGreen Code. According to the EMFAC2014 model, electric vehicles should account for approximately 4.7 percent of passenger vehicles[24] in 2025 and 10.3 percent by 2040 in the SoCAB region. The estimated potential fuel savings from the increased population of EVs is provided in Table 4.17-7.

[24] As defined by the traffic modeling for the project, passenger vehicles include the EMFAC vehicle categories of Light Duty Automobile (LDA) and Light Duty Truck (LDT).

Table 4.17-7: WLC Project Operational Fuel Usage

Source	2025			2040		
	Gallons of Diesel Fuel Per Year (gallons)[a]	Gallons of Gasoline Fuel Per Year (gallons)[b]	Electricity Use Per Year (MWh)	Gallons of Diesel Fuel Per Year (gallons)a	Gallons of Gasoline Fuel Per Year (gallons)b	Electricity Use Per Year (MWh)
County of Riverside (Transportation Sector) 2016/ MVU 2024[c]	**273,000,000**	**1,035,000,000**	**352,044**	**273,000,000**	**1,035,000,000**	**352,044**
Project + Low EV Penetration (Scenario A)						
Low EV Penetration	36,678	22,910	7,789	60,755	30,886	60,105
% of County	**0.013%**	**0.0022%**	**2.2%**	**0.022%**	**0.003%**	**17%**
Project + Medium EV Penetration (Scenario B)						
Medium EV Penetration	36,674	22,607	10,687	60,671	26,036	174,279
% of County	**0.013%**	**0.0022%**	**3%**	**0.022%**	**0.002%**	**50%**
% change from Low EV	**-0.01%**	**-1.3%**	**+37%**	**-0.1%**	**-16%**	**+190%**
Project + High EV Penetration (Scenario C)						
High EV Penetration	29,507	21,663	96,619	36,989	23,142	485,017
% of County	**0.011%**	**0.0021%**	**27%**	**0.014%**	**0.002%**	**138%**
% change from Low EV	**-20%**	**-5%**	**+1,140%**	**-39%**	**-25%**	**+707%**

SOURCE: ESA 2018
NOTES:

[a] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

[b] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2016. Available at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed April 2018. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

[c] Moreno Valley Utility, 2015 Integrated Resource Plan, March 2015,

As discussed under Section 4.17.3, *Methodology*, and presented in Table 4.17-7 above, the WLC project would provide the infrastructure for supporting a higher population of electric vehicles, in direct support of the state's targets of 1.5 million ZEVs by 2025 and 4.2 million ZEVs by 2040. The increase in EV populations will increase demand for electricity but reduce demand for fossil-based vehicle fuels.

Estimates for the number of EVs and the expected annual electricity demand associated with each of the three vehicle scenarios are presented below in Tables 4.17-8 through 4.17-10, based on the information summarized in Section 4.17.3, *Methodology.*

Table 4.17-8: Scenario A: Low EV Penetration Charging Loads

Vehicle Type	2025				2040			
	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)
Passenger Vehicles	533	1.1	21.3	7,789	2,058	9.1	164.7	60,105
Light Trucks (2 axle)	0	0	0	0	0	0	0	0
Medium Trucks (3 axle)	0	0	0	0	0	0	0	0
Large Trucks (4+ axle)	0	0	0	0	0	0	0	0
Total	**533**	**1.1**	**21.3**	**7,789**	**2,058**	**9.1**	**164.7**	**60,105**

Table 4.17-9: Scenario B: Medium EV Penetration Charging Loads

Vehicle Type	2025				2040			
	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)
Passenger Vehicles	659	1.4	26.4	9,622	5,795	25.6	464	169,214
Light Trucks (2 axle)	73	0.2	2.9	1,065	346	0.8	13.9	5,065
Medium Trucks (3 axle)	0	0	0	0	0	0	0	0
Large Trucks (4+ axle)	0	0	0	0	0	0	0	0
Total	**732**	**1.6**	**29.3**	**10,687**	**6,141**	**26.4**	**478**	**174,279**

Table 4.17-10: Scenario C: High EV Penetration Charging Loads

Vehicle Type	2025				2040			
	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)	Population	Peak Rate (MW)	Avg Daily (MWh)	Avg Annual (MWh)
Passenger Vehicles	659	1.4	26.4	9,622	5,795	25.6	464	169,214
Light Trucks (2 axle)	73	0.2	2.9	1,065	346	0.8	13.9	5,065
Medium Trucks (3 axle)	111	0.4	6.0	2,189	786	2.4	42.3	15,455
Large Trucks (4+ axle)	614	12.7	229.4	83,743	2,166	44.2	809.0	295,282
Total	**1,457**	**14.6**	**265**	**96,619**	**9,093**	**73.4**	**1,329**	**485,017**

The Project + Low EV Penetration scenario has the lowest population of EVs and only includes passenger vehicle EVs. The annual electricity use would be 2.2 percent of MVU's forecasted demand in 2024.

The Project + Medium EV Penetration scenario includes EV passenger vehicles and light trucks. The annual electricity use would be only slightly more than the Low EV Penetration scenario and would represent 3 percent of MVU's demand. As stated above, this scenario would increase electricity use, however, it would be displacing and reducing gasoline use by 4 percent.

The Project + High EV Penetration scenario analyzes the inclusion of an increased percentage of medium and heavy duty trucks that are EVs. Under this scenario, electricity demand would be 27 percent of MVU's total electricity demand and the EVs would displace a substantial number of fossil fuel burning vehicles.

As shown in Table 4.17-7, the Project + Medium EV Penetration scenario would reduce gasoline use by approximately 1.3 percent and increase electricity use by 37 percent in 2025 compared to the Low EV Penetration scenario. Diesel consumption would be about the same for the two scenarios. By 2040, gasoline use with the Medium EV Penetration scenario would be reduced by 16 percent from the Low EV Penetration scenario and displaced with EVs that would increase electricity by 190 percent from the Low EV Penetration scenario.

The Project + High EV scenario would realize a greater amount of fuel savings (gasoline and diesel) due to the higher percentage of trucks assumed to be EVs. For 2025, diesel use would decrease by approximately 20 percent compared to the Low EV Penetration scenario and gasoline would decrease by approximately 5 percent. By 2040, diesel use would decrease by 39 percent and gasoline would decrease by 25 percent. Electricity demand would increase more than 11 times the Low EV Penetration scenario by 2025, and approximately 7 times by 2040. However, as stated earlier, forecasting demand for 2040 is highly speculative and numbers presented are strictly for informational purposes.

As described earlier, these increases in transportation-related electricity will be offset through implementation of energy conservation measures and installation of on-site rooftop solar PV, resulting in an approximate 16 percent improvement in energy efficiency as compared to the baseline scenario at full buildout. Although the project would result in moderate increases in annual electrical demand from EV charging compared to MVU's current supply (for the low and medium EV penetration scenarios), MVU is committed to meeting the project's electricity demand through a future IRP update and planning process. As mentioned above, MVU's IRP addresses the fact that the project would exceed the utility's current and forecasted demand. However, the IRP states that a portion of the project's demand is incorporated into forecasted growth and MVU will monitor the development progress of the project. Any determination on additional capacity would be speculative considering MVU is aware of the project and its effect on grid electricity. MVU has a considerable amount of time to procure energy resources in anticipation of the project's development.

As shown in Table 4.17-7, the Project + Low EV Penetration scenario would represent a small fraction of the county's overall diesel and gasoline fuel use for 2025, making up 0.013 and 0.0022 percent respectively. By 2040, those numbers increase to 0.022 percent for diesel and 0.003 percent for gasoline. Although the fuel does slightly increase, the Project's fuel use is still negligible when compared to overall county use.

The Project + Medium EV Penetration scenario would account for 0.013 percent of total County diesel use and 0.0022 percent of total County gasoline use in 2025. By 2040, those percentages increase to 0.022 percent for diesel and remain approximately 0.0022 percent for gasoline. This scenario slightly lowers fuel use when compared to the Project + Low EV Penetration because it assumes a greater percentage of car and light truck EVs (See Section 4.17.3.3, *Technology Advancement* for assumptions).

The Project + High EV Penetration scenario would represent 0.011 percent of total County diesel use and 0.0021 percent of total County gasoline use in 2025. By 2040, those percentages increase to 0.014 percent for diesel and remain approximately 0.0020 percent for gasoline. The High EV Penetration scenario assumes light, medium, and heavy trucks would have a higher population of EVs that would

reduce diesel fuel use by 7,171 gallons per year from the Low EV Penetration scenario for 2025 and by 23,766 gallons per year for 2040.

Given the evidence presented herein, the WLC project would result in the efficient use of operational transportation fuel consistent with State and City goals. The project would represent between 0.002 to 0.003 percent of the County gasoline use and between 0.011 to 0.022 percent of County diesel use. Diesel and gasoline fuel consumption from the project would be negligible in any of the presented scenarios, however as stated in the electricity analysis above, any effects to energy resources from achieving the Project + High EV Penetration Scenario would be highly speculative, and associated analyses are presented herein for informational purposes only.

Operation of the WLC project would benefit from California's Pavley/ACC standards that are designed to result in more efficient use of transportation fuels. These vehicle efficiency standards are the most stringent in the nation and among the most stringent in the world. As shown in Tables 4.17-7 above, the project's operational activities under the Low EV Penetration Scenario (the most conservative scenario in terms of petroleum-based fuel consumption) would result in the consumption of approximately 0.013 percent of the County's diesel consumption and approximately 0.002 percent of the County's gasoline consumption, representing a very small fraction of the County's total fuel demand. Therefore, these activities would have a negligible effect on the transportation fuel supply. In conjunction with California's stringent vehicle efficiency standards, operation of the WLC project would not result in the wasteful, inefficient, or unnecessary consumption of transportation fuel.

Transportation Natural Gas

The WLC project (all scenarios) would also include regularly operating propane-powered yard trucks and CNG-powered forklifts that are typical of large warehouse facilities. Additionally, the project would include a CNG/LNG fueling station on-site that would be publically available for refueling. Table 4.17-11, below, shows the annual average natural gas use from operational vehicles and CNG/LNG vehicle refueling within the project.

Table 4.17-11: Natural Gas Use from Transportation

Source	Annual Fuel Use (MMBtu/yr)
State Natural Gas Consumption [a]	**2,253,678,345**
Yard Trucks[b]	14,543
Forklifts[b]	738
CNG/LNG Fueling Station[b]	805,148
Total Natural Gas Consumption (on- and off-road)	**820,429**
% of State	**0.036%**

NOTES:

[a] All uses; from US Energy Information Administration, California Natural Gas Consumption by Year (2017). Available at: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm Converted from 2,177,467 million cubic feet using a conversion factor of 1,035 Btu per cubic foot based on USEIA data (see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, April 28, 2017. Available: https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed July 2018).

[b] See Appendix F for detailed calculations of natural gas vehicles and CNG/LNG fueling station

As presented in Table 4.17-11 above, the natural gas use from operational vehicles and the CNG/LNG fueling station would represent approximately 0.036 percent of the statewide natural gas consumption. The analysis assumes a conservative estimate of 204 trucks completely refueling per day based on trip rates presented in the WLC project's traffic study.[25] The traffic study bases trip rates on ITE's code for a gas station with convenience store that has a relatively high trip rate. CNG fueling stations would

[25] Traffic study states an average daily traffic of 408 trips. This accounts for roundtrips of trucks, so the number of trucks visiting to refuel would be half of the average daily traffic volume.

likely have less daily visits than a traditional gas station, making the analysis even more conservative. The operational vehicles are also based on conservative assumptions of maximum operating hours of 7 hours for propane-powered yard trucks and 4 hours for CNG forklifts. Realistically, all of the yard trucks would not be operating simultaneously or continuously for 7 hours and forklifts would be used intermittently for the unloading and loading of warehousing goods. Furthermore, the analysis above represents additional natural gas use from vehicles and does not account for CNG/LNG trucks displacing diesel- or gasoline-powered vehicles. In actuality, the CNG/LNG trucks may displace fossil-fueled trucks on the project site. Even with the conservative assumptions for trip rates, volumes, non-displacement, and operating hours, and without considering the potential benefit of offsetting other vehicle fuels, the natural gas use from operational vehicles and the CNG/LNG fueling station represent a negligible percent of the State's total natural gas use.

According to SoCal Gas data, natural gas sales have been relatively stable over the past three years with a slight increase from 287 billion cubic feet in 2014 to 294 billion cubic feet in 2016. Southern California's natural gas supply is predominantly sourced from out of state with a small portion originating in California. Sources of natural gas are obtained from locations throughout the western United States as well as Canada.[26] According to the US Energy Information Administration (EIA), the United States has approximately 85 years of natural gas reserves based on consumption in 2015.[27] Statewide compliance with energy efficiency standards is expected to result in more efficient use of natural gas and therefore reduced consumption in future years. It is anticipated that SoCal Gas' existing and planned natural gas supplies would be sufficient to support the project's natural gas use and that the CNG/LNG fueling station would have a negligible effect on the natural gas supply.

Operation of the WLC project would benefit from California's Pavley/ACC standards that are designed to result in more efficient use of transportation fuels. These vehicle efficiency standards are the most stringent in the nation and among the most stringent in the world. Operation of the project would require very small amounts of natural gas to be consumed by vehicles at the site, and in conjunction with California's stringent vehicle efficiency standards, would not result in the wasteful, inefficient, and unnecessary consumption of natural gas.

4.17.7.2 Construction or Expansion of Electrical and Natural Gas Facilities

Threshold	Would the proposed project require the construction of new electrical and/or natural gas facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

Electricity

Through implementation of energy conservation measures the WLC project will exceed Title 24 energy standards by approximately 17 percent at Phase 1 and 16 percent at full buildout. The project would also incorporate renewable energy sources with a minimum of 14.1 MW of rooftop solar at buildout to achieve a net-zero energy use for the estimated office demands. Despite these improvements a number of SCE facilities would require relocation and expansion of MVU facilities would be needed in order to provide network backup (i.e., if the solar generation equipment were to fail) and accommodate the potential increase in electrical demand due to increased EV populations. Power poles, guy poles, and guy anchors for the existing overhead 115 kV line along World Logistic Center Parkway and Gilman Springs Road will need to be relocated at the time these roadways are widened. The portion of the existing 115 kV line along Eucalyptus Avenue may also need to be relocated into the new Eucalyptus Avenue alignment between World Logistic Center Parkway and Gilman Springs Road at the time the roadway is constructed. The existing 115 kV line along Brodiaea Avenue may be able to be protected

[26] California Gas and Electric Utilities, 2016 California Gas Report. 2016.
[27] EIA. *Frequently asked Questions. https://www.eia.gov/tools/faqs/faq.php?id=58&t=8*. Accessed April 2018.

in place except for a few hundred feet where the transmission line intersects with the new Merwin Street, which will need to be relocated to accommodate street and storm drain channel improvements.

The existing 12 kV overhead power distribution lines along Redlands Boulevard will need to be undergrounded when the roadway is developed to its ultimate width. The existing 12 kV overhead power feeder lines located along World Logistic Center Parkway and Alessandro Boulevard will need to be relocated and undergrounded as these roadway improvements take place during the development of the WLC project. The existing 12 kV overhead power feeder line running south along Virginia Street to the Moreno Compressor Station (planned as Open Space) will be protected in place. The existing overhead service lines from the World Logistic Center Parkway 12 kV line along Dracaea Avenue to the east and along Cottonwood Avenue to the west can be abandoned when existing on-site residences served by these facilities are abandoned. Per SCE requirements, SCE 12 kV undergrounded lines cannot be in a common trench with MVU facilities and require a separate underground facility with a minimum 6 feet from other utility lines.

Based on the *Technical Memorandum – Dry Utilities World Logistics Center, Moreno Valley, CA*, (Utility Specialists, October 24, 2013) prepared for the WLC project, construction of the first three logistics buildings that would occur during the initial phase of construction can be served by the existing MVU substation at Cottonwood Avenue and Moreno Beach Drive, as long as capacity is still available at that station. Subsequent buildings in Phase 1 of construction will require the expansion of this substation. The expansion that would occur to meet this demand would be the addition of two new 28 MW transformer units which can be accommodated within the existing substation property. New 12 kV underground feeder circuits, including trenching, conduit, electrical vaults, and conductors will need to be installed from the substation to the WLC project site. These improvements will occur along Cottonwood Avenue, along Moreno Beach Drive, and along Alessandro Boulevard, Brodiaea Avenue, and Cactus Avenue. These improvements are expected to take place concurrently with roadway construction.

To meet the WLC project's ultimate annual electricity demand, a new 112 kV substation will be constructed within the project limits at a central location near one of SCE's 115 kV transmission lines that will feed power to the substation. The *Dry Utilities* memo for the project indicates two potential locations; the first adjacent to the SCE transmission lines along Gilman Springs Road, and the other adjacent to the SCE transmission lines along Brodiaea Avenue. Impacts of constructing the new station at either of these on-site locations may be the same.

SCE will require approximately 2 acres for a switching station near the new 112 kV substation proposed by MVU to serve the WLC project. All MVU primary distribution conductors within the project will be installed within underground conduits and vaults within the public roadway rights-of-way or within easements as a joint trench with telephone, cable television, and natural gas. Since the installation or relocation of electrical facilities would take place concurrently with roadway construction and/or within dedicated easements, or protected in place, the construction of these facilities would not result in significant environmental effects. Connecting the site to existing utility lines is considered part of the project, the impact of which has been analyzed in the Revised Sections of the FEIR. Previously referenced Figure 3.16 depicts the proposed electrical facilities assuming 100 percent backup electrical service to the WLC site.

Natural Gas

Figure 3.17 in the Project Description depicts the existing natural gas pipelines at the site. An existing 3-inch medium pressure line traveling along World Logistics Parkway and Street F could supply the proposed CNG/LNG fuel station. Although there would be no anticipated use of natural gas by the buildings in the WLC project and thus no need for natural gas distribution infrastructure, SCGC has indicated that the existing 4-inch medium-pressure line underlying Redlands Boulevard and Cactus Avenue can be extended into and looped around the WLC project roadway alignments to serve the proposed development. New two-inch gas lines could also be installed to accommodate the WLC project's demand. Natural gas facilities could be installed in the public street rights-of-way and

easements as a joint trench with telephone, cable TV and electrical services. The gas main in Eucalyptus Avenue would be on the south side of the street and in its own trench as it was not included in the common trench installed to serve the Sketchers building.

Relocation of natural gas transmission lines within the WLC site into public street rights-of-way and easements will be necessary to support site development and grading. These include 11,100 feet of the 30-inch gas pipeline in Cottonwood Avenue from Redlands Boulevard to World Logistics Parkway and then southeast to Virginia Street and Alessandro Boulevard intersection; 1,900 feet of 30-inch gas line from Gilman Springs Road at Lisa Lane southwest to Alessandro Boulevard; 1,000 feet of 16-inch gas line owned by Questar from Gilman Springs Road southwest to Alessandro Boulevard and 4,000 feet of 16-inch gas line owned by Questar on the Maltby Avenue alignment from Merwin Street to World Logistics Parkway. The remaining transmission gas lines are anticipated to be protected in place within the proposed streets or easements between buildings. The regulator station located at the southeast corner of Gilman Springs Road and Laurene Lane east of the WLC project will need to be relocated as part of the widening of this road. The gas facility on Alessandro Boulevard and Virginia Street will remain in place as the project develops in this area. The SDG&E natural gas compression station on Virginia Street south of the project site, known as the Moreno Compressor Station, along with a smaller facility on Virginia Street at Boadicea Avenue will be protected in place. Since the installation or relocation of natural gas facilities would take place concurrently with roadway construction and or within dedicated easements, or protected in place, the construction of these facilities would not result in significant environmental effects.

4.17.7.3 Energy Standards, Policy, Regulation Consistency

Threshold	The Degree to which the Project Complies with Existing Energy Standards

This impact assesses whether the WLC project would conflict with any applicable standards, policies, or regulations, as discussed below.

The project would comply with applicable CARB regulations restricting the idling of heavy-duty diesel motor vehicles and governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment. As discussed in Section 4.7, *Greenhouse Gas Emissions*, CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. The measure prohibits diesel-fueled commercial vehicles greater than 10,000 pounds from idling for more than five minutes at any given time. While intended to reduce construction emissions, compliance with the above anti-idling and emissions regulations would also result in energy savings from the use of more fuel-efficient engines. According to the CARB staff report that was prepared at the time the anti-idling Airborne Toxic Control Measure was being proposed for adoption in late 2004/early 2005, the regulation was estimated to reduce non-essential idling and associated emissions of diesel particulate matter and nitrogen oxide (NO_X) emissions by 64 and 78 percent respectively in analysis year 2009.[28] These reductions in emissions are directly attributable to overall reduced idling times and the resultant reduced fuel consumption. Mitigation Measure 4.3.6.2A includes a stricter provision that would limit idling to no more than three minutes in any one hour. Therefore, fuel savings have the potential to be even more than those estimated from the Airborne Toxic Control Measure.

CARB has also adopted emission standards for off-road diesel construction equipment of greater than 25 hp. The emissions standards are referred to as "tiers," with Tier 4 being the most stringent (i.e., least polluting). The requirements are phased in, with full implementation for large and medium fleets by 2023 and for small fleets by 2028. The project would accelerate the use of cleaner construction equipment by using mobile off-road construction equipment greater than 50 horsepower (wheeled or tracked) that meets, at a minimum, the Tier 4 off-road emissions standards as specified in Mitigation

[28] CARB, Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Appendix F, July 2004, https://www.arb.ca.gov/regact/idling/idling.htm, Accessed April 2018.

Measure 4.3.6.2A. Field testing by construction equipment manufacturers has shown that higher tier equipment results in lower fuel consumption. For example, Tier 4 interim engines have shown a 5 percent reduced fuel consumption compared to a Tier 3 engine.[29] Similar reductions in fuel consumption have been shown for Tier 3 engines compared to a Tier 2 engine.[30]

The project would comply with and exceed (through its PDFs and mitigation measures) the applicable provisions of Title 24 and the CALGreen Code in affect at the time of building permit issuance and buildings over 500,000 square feet will be designed to be LEED certified. According to the CEC, buildings compliant with the Title 24 (2016) standards should use 5 percent less energy for lighting, heating, cooling, ventilation, and water heating than the prior Title 24 (2013) standards for non-residential uses.[31] As specified in the Project's Design Features, the project would include numerous energy and waste reduction features that would allow the project to comply with or exceed the Title 24 standards and achieve energy savings equal to or greater than what is required by state regulations.

With respect to operational transportation-related energy, the WLC project would support statewide efforts to improve transportation energy efficiency and reduce transportation fuel consumption with respect to private automobiles. In particular, the project would provide the infrastructure for supporting a higher population of electric vehicles, in direct support of the state's targets of 1.5 million ZEVs by 2025 and 4.2 million ZEVs by 2040. Thus, the project would comply with existing energy standards.

4.17.8 Significant Impacts

The project has no significant impacts related to energy use, consumption, resources, or standards.

29 Businesswire, "Fuel Duel" Confirms 5 Percent Higher Fuel Efficiency for Cummins Tier 4, June 25, 2009, http://www.businesswire.com/news/home/20090625005468/en/%E2%80%9CFuel-Duel%E2%80%9D-Confirms-5-Percent-Higher-Fuel, Accessed April 2018.

30 John Deere, Engine Performance, Fuel Efficiency, and Clean Air, Emissions Technology for Non-Road Applications, 2006, http://bellpower.com/uploads/product_brochures/15_Exp_EmissionsBrochure%20dswt14%5B1%5D.pdf, Accessed April 2018.

31 CEC, Adoption Hearing, 2016 Building Energy Efficiency Standards, June 10, 2015, http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf, Accessed April 2018.

NOTE TO READERS: The Revised Sections of the Final EIR (FEIR) sets forth those portions of Section 5.0 that have been revised. Revisions to, and deletions from, the FEIR have been identified in a separate document, available for review at the City of Moreno Valley. The absence of any reference to a portion of Section 5.0 means that the corresponding portion of Section 5.0 in the FEIR remains unchanged or has been deleted. However, where appropriate, unrevised portions of the FEIR have been included for ease of understanding.

5.0 OTHER CEQA TOPICS

6.0 Cumulative Impacts

Chapter 6.0 is a new Chapter in the Revised Sections of the FEIR which evaluates the cumulative impact of the project in response to the court ruling on the petition for a Writ of Mandate, Superior Court of California, County of Riverside (Case No. RIC1510967) for the World Logistics Center (WLC) project on February 8, 2018. The Court ruling requires that the analysis of cumulative impacts should use the "Project List Method", in addition to the "Summary of Projects Method" to determine the project's cumulative impacts. As indicated in Chapter 4.0 of the Revised Sections of the FEIR, the cumulative analysis that was previously located in that section in the 2015 Final EIR has been expanded and relocated to Section 6.0 of the Revised Sections of the FEIR. The 2015 FEIR utilized a combination of the "Summary of Projections" method and the "Project List Method" to document cumulative projects and to conduct the cumulative impact analysis. The Revised Sections of the FEIR cumulative impact analysis uses the City of Moreno Valley General Plan Land Use Element growth projections and other regional plans (i.e., 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy), in conjunction with other known projects (project list method) to document cumulative impacts. The project list method was utilized for portions of surrounding jurisdictions including the counties of Riverside and San Bernardino, March JPA and the cities of Riverside, Perris, Hemet, San Jacinto, Redlands, Beaumont and Calimesa.

6.0.1 Approach to Cumulative Impact Analysis

In response to the court ruling, both the Summary of Projections method and the Cumulative Project List method has been updated to reflect current cumulative projects. The summary of growth projections for the City of Moreno Valley is provided in Table 6.0-1. Extensive research has been completed to identify past, present and reasonably foreseeable future projects and available associated CEQA documents to assist in the updated analysis of cumulative impacts. A total of 361 cumulative projects have been identified in the City of Moreno Valley and the surrounding cities, and unincorporated areas. These projects that are documented in Table 6.0-2 and Figure 6.0 include all cumulative projects that are located in the various cumulative geographic areas defined in Sections 6.1 through Section 6.17. A cumulative project area has been identified for each environmental topic evaluated in the Revised Sections of the FEIR and projects located with the cumulative impact area are summarized in tables and figures for each environmental topic. The CEQA documents listed in Table 6.0-1 are available for review at the City of Moreno Valley.

The land use assumptions for the 361 identified cumulative projects were taken from either the project-specific information contained in the associated CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes more intense cumulative development than is likely to occur and is therefore conservative in the sense that it would slightly over-state cumulative impacts.

6.0.2 Definition of Cumulative Impacts

Section 15130 of the CEQA Guidelines requires that an EIR address cumulative impacts of a project when the project's incremental effect would be cumulatively considerable. "Cumulatively considerable" means that "the incremental effects of an individual project are considerable when viewed in connection

with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130."

Section 15355 of the CEQA Guidelines states that "cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (CEQA Guidelines Sections 15130(a)(3) and 15130(b)(5)).

According to Section 15130 of the CEQA Guidelines, the discussion of cumulative effects "... need not provide as great a detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR is not required to discuss cumulative impacts for environmental topic areas which have no individual project related impacts.

CEQA defines cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." (CEQA Guidelines Section 15130). The Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely-related past, present, and reasonably foreseeable future projects (Section 15335). The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period of time.

With respect to the analysis of cumulative impacts, CEQA requires the following:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as much detail as is provided regarding the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Pursuant to CEQA Guidelines, Section 15130, the assessment of cumulative impacts contained in EIRs is typically based on either: (i) a list of past, present, and probable future projects, which are either approved or being considered for approval by the City or other municipalities; or (ii) growth projections set forth in local and regional plans, including regional modeling plans. Due to the size of the project and its potential future new land use and employment implications for the City, the cumulative analysis for the Revised Sections of the FEIR use the City's General Plan growth projections in conjunction with the newly developed cumulative project list. It is expected that the cumulative impact analysis set forth in the Revised Sections of the FEIR will be conservative and would tend to overstate (rather than understate) cumulative impacts because the impacts of some of the listed projects were wholly or partially taken into account by the growth projections summarized in Section 6.0.2 and Section 6.0.3 and because some of the listed projects ultimately may not be approved.

The significance of a cumulative impact may be greater or lesser than the effects resulting from the individual actions depending on whether the effects are additive, synergistic or countervailing. Thus, as set forth above, this section evaluates the project together with (i) the reasonably foreseeable potential effects of other closely related past, present, and reasonably foreseeable or probable future development in the area of the project, and (ii) growth projections set forth in regional plans.

Criteria for evaluating the significance of adverse effects are identified for each environmental topic area in Chapters 3.0 and 6.0. These criteria, which are based on resource sensitivity, quality, and quantity, are also instructive when evaluating whether the environmental effect resulting from implementation of a particular project is cumulatively considerable. The timing and duration of each activity is also an important consideration for evaluating the potential cumulative effects of activities that may occur only for a limited period. In such cases, a cumulative effect may occur only when two or more of the activities are occurring simultaneously.

Because of the nature of individual environmental factors, the cumulative "universe" for every issue addressed in the Revised Sections of the FEIR will not be identical. For example, the cumulative universe for noise impacts is reasonably assumed to be the traffic impact area (portion of Western Riverside County), which is much larger than the cumulative universe for public service impacts (i.e., the service area of the various service providers). The individual cumulative areas for the issues addressed in this Revised Sections of the FEIR are provided within the cumulative impacts discussion in the respective impact sections, but range from specific areas within the City of Moreno Valley to western Riverside County as appropriate.

6.0.3 City of Moreno Valley Growth Projections

The Moreno Valley General Plan establishes policies to guide future development within the City. Its implementation is long-term in nature. The Regional Growth Projections method is an appropriate methodology in evaluating cumulative impacts because it provides general growth projections for the region and considers long-term growth. Table 6.0-1. summarizes the cumulative growth information from the Final Program EIR for the SCAG from 2016 (Section 7, Cumulative Impacts). Table 6.0. shows that the City expects to grow at an average annual rate of 2–3 percent from 2000 to 2030, with a population at that point of 238,703 persons and 71,619 households. The City will comprise approximately seven percent of the County's population and housing stock at that time.

Table 6.0-1: Local and Regional Growth Projections for Moreno Valley and County of Riverside (2012–2040)

	Population		Households	
Jurisdiction	**2012**	**2040**	**2012**	**2040**
City of Moreno Valley	197,600	256,600	51,800	73,000
Average Annual Increase	—	+1.1%	—	+1.5%
Riverside County	2,245,000	3,168,000	694,000	1,049,000
Average Annual Increase	—	+1.5%	—	+1.8%
City (Percent of County)	8.7%	8.0%	7.5%	7.0%

Sources: SCAG, 2016 RTP Growth Forecast, Table 7-1, General Plan Final EIR, Section 7.0, Cumulative Impacts.

6.0.4 Local/Regional Summary of Growth Projections

6.0.4.1 Regional Plans

SCAG estimates regional growth for the Riverside County area for the purposes of planning and public policy development. The most recent set of growth projections are provided in the most recent Regional Transportation Plan (RTP) Growth Forecast, based on extensive analyses of the regional economic and demographic conditions. The 2016 RTP Growth Forecast provides estimates and forecasts of employment, population, and housing for the period between 2016 and 2040. Consistent with the projections shown in previously referenced Table 6.0-1 shows that the population, housing, and employment of the City are expected to increase consistent with overall regional trends for that period (i.e., approximately 1%–2% per year).

According to SCAG projections, the population of Moreno Valley is expected to increase by about 59,000 persons or approximately 30 percent between 2016 and 2040 to approximately 256,600 persons. By comparison, the population of Riverside County is projected to increase by 923,000 persons or approximately 41 percent between 2012 and 2040 to approximately 3,168,000 persons. The number of households is estimated to increase approximately 41 percent in Moreno Valley and 51 percent in Riverside County over this same time period.

6.0.5 Cumulative Project List

The cumulative project list has been updated to include past, present and reasonably foreseeable probable future projects in the surrounding jurisdictions that have the potential to result in cumulative impacts. The updated cumulative project list was compiled from available information in the identified geographic cumulative impact area and is current as of Spring 2018 to provide for informed decision-making, informed public participation, and a good faith effort at full disclosure of potential cumulative impacts. Refer to Table 6.0-2 and Figure 6.0 for the listing, description and general location of these projects. The list of cumulative projects in Table 6.0-2 includes all projects that are located in the various cumulative geographic areas, including for the sake of completeness, projects that have been withdrawn or for which no environmental information was reasonably obtainable. Projects that have been withdrawn or otherwise for which potentially contributory impacts would be speculative have not been considered in the resource-specific analyses in Section 6.1 through Section 6.17. The cumulative geographic areas incorporate portions of the cities of Moreno Valley, Riverside, Perris, Redlands, Hemet, San Jacinto, and Beaumont, the March JPA and portions of unincorporated Riverside and San Bernardino counties. CEQA documents reviewed to identify specifics about potentially cumulative projects include Environmental Impact Reports (EIRs), Mitigated Negative Declarations (MNDs), Negative Declarations (NDs), Initial Studies (ISs) and Exemptions (Exempt). In total over 360 projects have been identified within the surrounding jurisdictions that would cause impacts that could combine with those of the project to contribute to cumulative impacts, in conjunction with the summary of projections method. Only those cumulative projects with available CEQA documents have been included in the cumulative project summary tables and figures in Section s 6.1 – 6.17.

Individual project CEQA documents have been collected for projects on the list, to the extent feasible, to assist in the cumulative impact analysis for each environmental topical area. These CEQA documents have been reviewed and incorporated in the cumulative impact analysis for each environmental topic. The cumulative projects that are included in each cumulative impact analysis in Sections 6.1 through 6.17 are included in each section in a table and the specific environmental topic cumulative projects boundary is illustrated in a figure. The composite cumulative projects boundary map is shown in Figure 6.0.

Map Label; Project Name; "OLD_SL"

B City of Beaumont

B-1: Fairway Canyon SCPGA Tract Nos. 31462, 36558, and*: 147
B-2: Tournament Hills 3, TM 36307: 154
B-3: Heartland: 66
B-4: Hidden Canyon: 76
B-5: ProLogis/Rolling Hills Ranch: 16
B-6: Mountain Bridge Regional Commercial Planned Commu*: 86
B-7: Kirkwood Ranch (#14): 149
B-8: Noble Creek Vistas (#10): 152
B-9: Sundance (#17): 146
B-10: Tract No. 32850 (#39): 151
B-11: San Gorgonio Village, Phase 2 (#45): 156
B-12: Beaumont Commercial Center: 155
B-13: Four Seasons (#23) Tract Nos. 32260 and 33096: 148
B-14: Potrero Creek Estates (#26): 150

C City of Calimesa

C-1: TTM 33931 Fiesta Oak Valley/Mesa Verde Estates: 257
C-2: Summerwind Ranch: 258
C-3: JP Ranch: 259

H City of Hemet

H-1: TTM 36841: 205
H-2: Rancho Diamante: 217
H-3: Tres Cerritos Specfic Plan: 222
H-4: Sanderson Square: 224
H-5: Mc Sweeny Farms SP: 223
H-6: Ramona Creek: 227
H-7: Peppertree Specific Plan: 229
H-8: Florida Promenade Residential SP: 230
H-9: TTM 31807 / 31808: 231
H-10: Downtown Hemet Specific Plan: 202

MV City of Moreno Valley

MV-1: Auto Mall SP: 30
MV-2: TR35823 / Stowe Passco Devel.: 88
MV-3: ProLogis: 72
MV-4: Westridge Commerce Center: 12
MV-5: P06-158 / Gascon: 85
MV-6: Highland Fairview Corporate Park: 5
MV-7: TR33962 / Pacific Scene Homes: 40
MV-8: TR32460 / Sussex Capital: 37
MV-9: TR32459 / Sussex Capital: 38
MV-10: TR30998 / Pacific Communities: 41
MV-11: TR30411 / Pacific Communities: 39
MV-12: Moreno Medical Campus: 31
MV-13: Cresta Bella: 77
MV-14: TR32548 / Gabel, Cook & Assoc: 48
MV-15: TR32218 / Whitney: 50
MV-16: TR32284 / 26th Corporation & Granite Capitol: 49
MV-17: TR31590 / Winchester Associates: 43
MV-18: Convenience Store / Fueling Station: 32
MV-19: Senior Assisted Living: 42
MV-20: Moreno Marketplace: 83
MV-21: PEN16-0053 Medical Center: 170
MV-22: TR36882 (PA15-0010) SFR: 173
MV-23: PEN16-0129/0130 MV Ranch Apartments: 175
MV-24: TM 36436 (PA12-0005): 167
MV-25: TR32142: 65
MV-26: TR 30268 (PA01-0072) Pacific Communities: 168
MV-27: TR32917 / Empire land: 52
MV-28: TR34329 / Granite Capitol: 53
MV-29: TR36340: 36
MV-30: PA03-0168 TR 31517: 162
MV-31: PA15-0034 TR 36983: 169
MV-32: TTM 31592 (P13-078) SFR: 171
MV-33: TR32645 / Winchester Assoc: 47
MV-34: TR34397/Winchester Assoc: 46
MV-35: TR31771 / Sanchez: 45
MV-36: TM 31618 (PA03-0106): 166
MV-37: Vogel /PA09-004: 73
MV-38: Vogel Properties: 117
MV-39: VIP Moreno Valley (SaresRegis/Vogel): 116
MV-40: PEN17-0036 Warehouse: 176
MV-41: First Nandina Logistics Center: 109
MV-42: Indian Street Commerce Center: 111
MV-43: Ivan Devries / PA06-0017: 74
MV-44: Modular Logistics Center (Kearny RE Co): 112
MV-45: Iris Plaza: 138
MV-46: Harley Knox/Redlands Development: 133
MV-47: PA07-0129 TR 35606 SFR: 163
MV-48: PA11-001 thru 007 March Business Center: 69
MV-49: Indian Business Park: 3
MV-50: San Michele Industrial Center: 71
MV-51: PA07-0165 thru 01667 First Industrial I & II: 1
MV-52: First Industrial III & IV: 70
MV-53: I-215 Logistics Center: 110
MV-54: Moreno Valley Logistics Center (Prologis): 113
MV-55: MV Commerce Park II (Alere): 114
MV-56: Tract Map 33810: 141
MV-57: Tract Map 34151: 142
MV-58: Tract Map 33024: 143
MV-59: Tract Map 31442: 144
MV-60: Tract Map 36401: 145
MV-61: Walmart & Gas Station: 137
MV-62: Tract Map 22180: 139
MV-63: PA14-0053 (TTM 36760) Legacy Park: 160
MV-64: TR22180 / Young Homes: 63
MV-65: TR33607 / TL Group: 59
MV-66: TR34988 / Stratus Properties: 58
MV-67: TR32515: 64
MV-68: PA07-0035: 8
MV-69: PA07-0039 (Industrial Area SP): 9
MV-70: TR32756 / CTK, Inc.: 55
MV-71: TR34681 / Perris Pacific Co.: 56
MV-72: 35861 Frederick Homes: MV-83
MV-73: TR36038 / Alessandro Village Plaza LLC: 57
MV-74: TR34216 / Creative Design Assoc: 54
MV-75: Aqua Bella Specific Plan: 35
MV-76: Commercial Medical Plaza PA09-0033 thru 0039, and*: 84
MV-77: Minka Lighting: 107
MV-78: Overton Moore Properties PA08-0072: 6
MV-79: Shaw Development: MV-103
MV-80: PA15-0032 MV Cactus Center: 174
MV-81: Ridge Property Trust PA07-0147 & PA 07-0157: 75
MV-82: Centerpointe Bus. Ctr: 108
MV-83: Centerpointe Business Park: 7
MV-84: PA16-0075 Brodiaea Business Center: 161
MV-85: Retail Center / Winco Foods: 33
MV-86: TR32505 / DR Horton: 51
MV-87: TR31814 / Moreno Valley Investors: 60
MV-88: TR33771 / Creative Design Assoc: 61
MV-89: TR35663 / Kha: 62
MV-90: PEN16-0110 Commercial Pad H: 164
MV-91: TR31305 / Richmond American: 44
MV-92: TR 33256: 165
MV-93: PA14-0042 Edgemont Apartments: 157
MV-94: PA15-0002 Box Springs Apartments: 172
MV-95: Moreno Beach Market PLace/Lowes: 11
MV-96: 31394 Pigeon Pass, Ltd.: MV-50
MV-97: 32005 Red Hill Village, LLC: MV-54
MV-98: 33388 SCH Development, LLC: MV-62
MV-99: 36038 Alessandro Village Plaza, LLC: MV-84
MV-100: Scottish Village: MV-77
MV-101: Restaurant: MV-91
MV-102: Moreno Valley Professional Center: MV-98
MV-103: Gateway Business Park: MV-102
MV-104: 373K Industrial Facility: MV-18
MV-105: 35369 Tason Myers Property: MV-79
MV-106: 35304 Jimmy Lee: MV-85
MV-107: 32711 Isaac Genah: MV-72
MV-108: O'Reilly Automotive: MV-89
MV-109: Quail Ranch: MV-73
MV-110: TM 33417: MV-20
MV-111: 35769 Michael Chen: MV-81
MV-112: PA09-0006 Jim Nydam: MV-82
MV-113: Ironwood Residential: MV-106
MV-114: Stoneridge Town Centre - Vacant Restaurant: MV-105
MV-115: Olivewood Plaza - Office Building: MV-99
MV-116: 31621 Peter Sanchez: MV-53
MV-117: MV-101: MV-101
MV-118: 28860 Professor's Fun IV: MV-47
MV-119: 32126 Salvador Torres: MV-55
MV-120: Moreno Valley Shopping Center: MV-35
MV-121: Yum Donut Shop: MV-93
MV-122: Centerpointe Business Park: MV-34
MV-123: Rancho Belago Plaza - Retail: MV-92
MV-124: Alessandro & Lasselle: MV-86
MV-125: 32756 Jimmy Lee: MV-78
MV-126: TTM 33222: 260

M March AFB

M-1, Amstar/Kaliber Development PP22925, 29
M-2, Meridian Business Park, 13
M-3, Meridian Business Park - Phase 3, 124
M-4, March Business Center - South Campus, RC-17
M-5, Meridian LNR, 126
M-6, Ben Clark Training Facility, RC-18
M-7, Meridian Business Park - Phase K4, 125
M-8, March LifeCare Campus Specific Plan, 34
M-9, TM 34748, MV-12
M-10, Airport Master Plan, MA-2
M-11, PA 06-0014 (Pierce Hardy Limited Partnership), MV-108

P City of Perris

P-1: TR32707: 67
P-2: TR34716: 68
P-3: P05-0477: 79
P-4: Bookend: 128
P-5: Markham East: 130
P-6: Perris Circle Industrial Park: 100
P-7: Duke Warehouse: 104
P-8: First Perry Logistics Project: 106
P-9: Aiere: 25
P-10: IDS: 135
P-11: Ridge II: 22
P-12: Starcrest P011-0005; 08-11-0006: 80
P-13: Ridge: 134
P-14: Rados Distribution Center: 95
P-15: Duke Perris Logistics Center: 96
P-16: Perris Ridge Commerce Center I: 102
P-17: SRG Perris LC: 103
P-18: P07-07-0029: 20
P-19: P05-0192: 18
P-20: P05-0113: 17
P-21: P07-09-0018: 19
P-22: NICOL: 131
P-23: Westcoast Textiles: 132
P-24: Optimus Logistics Center 1: 97
P-25: Optimus Logistics Center 2: 98
P-26: Duke Warehouse: 99
P-27: Perris DC (Industrial Property Trust): 101
P-28: Duke Warehouse: 105
P-29: P06-0411: 23
P-30: Avelina: 183
P-31: Perris Family Apartments: 182
P-32: Lewis Retail Center: 184
P-33: Harvest Landing Specific Plan: 78
P-34: South Perris Industrial Phase 3: 94
P-35: Verano Apartments: 179
P-36: South Perris Industrial Phase 2: 93
P-37: Cabrillo: 181
P-38: Sequoia: 180
P-39: South Perris Industrial Phase 1: 92
P-40: TR 32041: P-38
P-41: P 06-0228: P-25
P-42: TR 31650: P-36
P-43: TR 31225: P-32
P-44: TR 33193: P-40
P-45: P 12-05-0013: P-28
P-46: P 06-0378: P-26
P-47: Park West Specific Plan: P-42
P-48: TR 33338: P-41
P-49: TR 31240: P-34
P-50: P 11-09-0011: P-27
P-51: TR 30973: P-31
P-52: TR 31226: P-33
P-53: TR 31659: P-37
P-54: TTM 32708: P-46
P-55: Perris Marketplace: P-12
P-56: PM 34199 / TPM 34697: P-47
P-57: P 04-0343: P-24
P-58: Jordan Distribution: 24
P-59: TR 31407: P-35
P-60: Retail on Redlands: P-43
P-61: Investment Development Services (IDS) II: P-5

RD City of Redlands

RD-1: Tract 18988: 191
RD-2: Redlands Pioneer Tract: 187
RD-3: Newland Homes Tract: 186
RD-4: Redlands Pennsylvania Tract: 190
RD-5: I-10 Redlands LC - A: 242
RD-6: Woodsprings Hotel: 194
RD-7: RV Storage Facility: 195
RD-8: Liberty Lane Apartments: 185
RD-9: Hilton Home2 Suites: 192
RD-10: Park Ave Industrial Center: 196
RD-11: Marriott Springhill Suites: 193
RD-12: I-10 Redlands LC - B: 243
RD-13: Ashley Furniture: 244
RD-14: Redlands DC 772,000 SF: 245
RD-15: 2220 Almond Ave: 246
RD-16: APL Logistics: 249

R City of Riverside

R-1: Sycamore Canyon Business Park - Bldgs 1&2: 122
R-2: Alessandro Business Center (Western Realco): 123
R-3: P07-1028, -0102; and P09-0416, -0418, -0419: 26
R-4: Quail Run: 199
R-5: Canyon Springs Healthcare Campus: 198
R-6: 2450 Market Street: R-33
R-7: 2861 Mary Street: R-59
R-8: 5938-5944 Grand Avenue: R-28
R-9: Magnolia Avenue Specific Plan: R-9
R-10: SR-91/ Van Buren Commercial: R-30
R-11: Citrus Business Park Specific Plan: R-5
R-12: Sycamore Canyon Business Park Specific Plan: R-17
R-13: 14601 Dauchy Av. - TM 36370: R-35
R-14: 360 Alessandro Boulevard: R-31
R-15: Mission Grove Specific Plan: R-11
R-16: Sycamore Canyon Specific Plan - R-16
R-17: 5940-5980 Sycamore Canyon Boulevard: R-64
R-18: Hunter Business Park: R-7
R-19: 807 Blaine Street: R-20
R-20: 474 Palmyrita Avenue: R-67
R-21: 1006 & 1008 Clark Street: R-46
R-22: 3719 Strong Street: R-45
R-23: 1710 Main Street (P12-0717): R-58
R-24: Downtown Specific Plan: R-6
R-25: P14-0045 thru -0048: R-25
R-26: Marketplace Specific Plan: R-10
R-27: 2586 University Avenue: R-37
R-28: 2340 Fourteenth Street: R-21
R-29: 6570 Magnolia Avenue; 3739 & 3747 Central Avenue: R-63
R-30: 3545 Central Avenue: R-60
R-31: P08- 0396 / P08-0397 Thru -0399 / TM 35620: R-48
R-32: Walmart Expansion: R-54
R-33: 5731, 5741, 5761 & 5797 Pickler Street: R-61
R-34: 4247 Van Buren Boulevard: R-39
R-35: 3990 Reynolds Road: R-51
R-36: Magnolia Garden Condominiums: R-27
R-37: 3705 Tyler Street: R-62
R-38: Park Sierra Avenue: R-22
R-39: Riverwalk Vista Specific Plan: R-15
R-40: P12- 0019 / P12-0156 / P12-0158: R-26
R-41: 4824 Jones Avenue: R-36
R-42: Rancho La Sierra Specific Plan: R-13
R-43: P05-1528 \ P09-0087 \ TM 34509: R-47
R-44: 6465 Sycamore Canyon Boulevard: R-32
R-45: P06-0591: R-66
R-46: Sycamore-Highlands Specific Plan: R-18
R-47: P06-0160 / P06-1281: R-55
R-48: P06-1408: MV-109
R-49: Canyon Springs Specific Plan: R-4
R-50: Orangecrest Specific Plan: R-12
R-51: P10-0808 / P10-0708: R-24
R-52: 19811 Lurin Avenue: R-42
R-53: P06-1404 / Lurin Avenue / TM 33482: R-44
R-54: P06-1396 / Mariposa Avenue / TM 33481: R-43
R-55: P06-0900 / P08- 0269 / P08-0270 / TTM 32301: R-40
R-56: Office, Magnon & Panattoni: R-57
R-57: SEC Sycamore Canyon Boulevard & Box Springs Road: R-65
R-58: Canyon / Valley Springs Parkway: R-23
R-59: Alessandro and Gorgonio: R-1
R-60: Alessandro Bl.: R-2
R-61: Gless Ranch: 261
R-62: 6091 Victoria Avenue (P13-0432): R-34
R-63: 8616 California Avenue (P08-0084; PM 35852): R-41
R-64: P13-0389 / TM 36579: R-52
R-65: P13-0723; P13-0724; P13-0725; TM 36654: R-53
R-66: Azar Plaza: R-56

SJ City of San Jacinto

SJ-1: Gateway Area Specific Plan: 87
SJ-2: TR 31886: 232
SJ-3: TR 30598: 233
SJ-4: TR 32955: 234

RC Unincorporated Riverside County

RC-1: TR35530 / Quail Ranch Specific Plan: 89
RC-2: Jack Rabbit Trail: 90
RC-3: The Preserve / Legacy Highlands SP - Commercial and Residential: 91
RC-4: Badlands Sanitary Landfill: 197
RC-5: Villages of Lakeview - Commercial Development and Residential Development: 82
RC-6: Rider Business Center (Core 5 Industrial Partners): 120
RC-7: Nuevo Distribution Center: 127
RC-8: Trucking DC (Central Freight, LLC): 121
RC-9: Oleander Business Park PP20699: 28
RC-10: Majestic Freeway Business Center: 27
RC-11: Alessandro Commerce Center: 118
RC-12: Cores Industrial Partners: 119
RC-13: Sunny-Cal Specific Plan (#40): 153
RC-14: University Highlands: RC-33
RC-15: TTM 33410 Box Springs: RC-31
RC-16: Rider Street Quarry: RC-15
RC-17: PP 24608: RC-25
RC-18: TR 32406: P-39
RC-19: CUP 03599: RC-24
RC-20: PP 25699: RC-27
RC-21: CUP 03527: RC-23
RC-22: TR 30592: RC-14, RC-28
RC-23: PP 25768: RC-29
RC-24: PP 21144: RC-10
RC-25: PP 16976: RC-9
RC-26: PM 32699: RC-26
RC-27: Yocum Baldwin: RC-16
RC-28: CUP 03315: RC-12
RC-29: 18580 Van Buren Boulevard: R-38
RC-30: Knox Logistics: RC-32
RC-31: PP 23342: RC-13
RC-32: TTM 31537: 236
RC-33: TTM 34130: 237
RC-34: Emerald Acres SP #381: 235
RC-35: TR 34677,31100,32391,33448,31101,31009,32282: 238, 241
RC-36: TR36478, TR36480, PP25219: 239
RC-37: TR 36504: 240
RC-38: San Gorgonio Crossings: 256
RC-39: Tract 33869: RC-8

SB Unincorporated San Bernardino County

SB-1: Redlands Gateway Logistics - B: 248
SB-2: Redlands Gateway Logistics - A: 247
SB-3: Prologis 12: 253
SB-4: Prologis 17: 252
SB-5: Prologis #13: 251
SB-6: Prologis #8: 250
SB-7: Sam Redlands Tract: 189
SB-8: Jacinto Tract: 188

WA (SJ)WA-1: San Jacinto Wildlife Area (centroid)

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SOURCE: ESRI; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.0
Cumulative Projects
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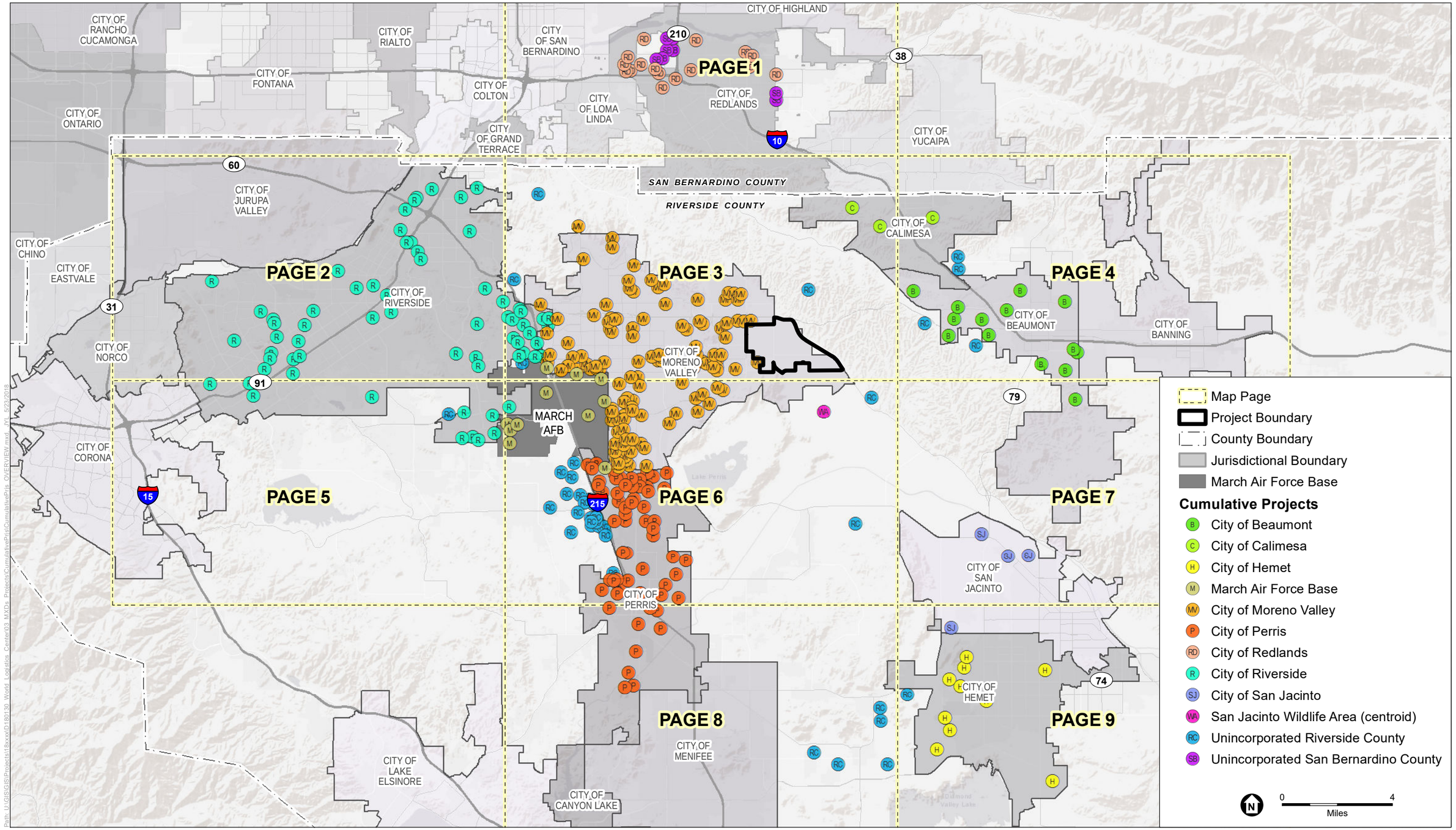

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SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.0
Cumulative Projects
Index Map

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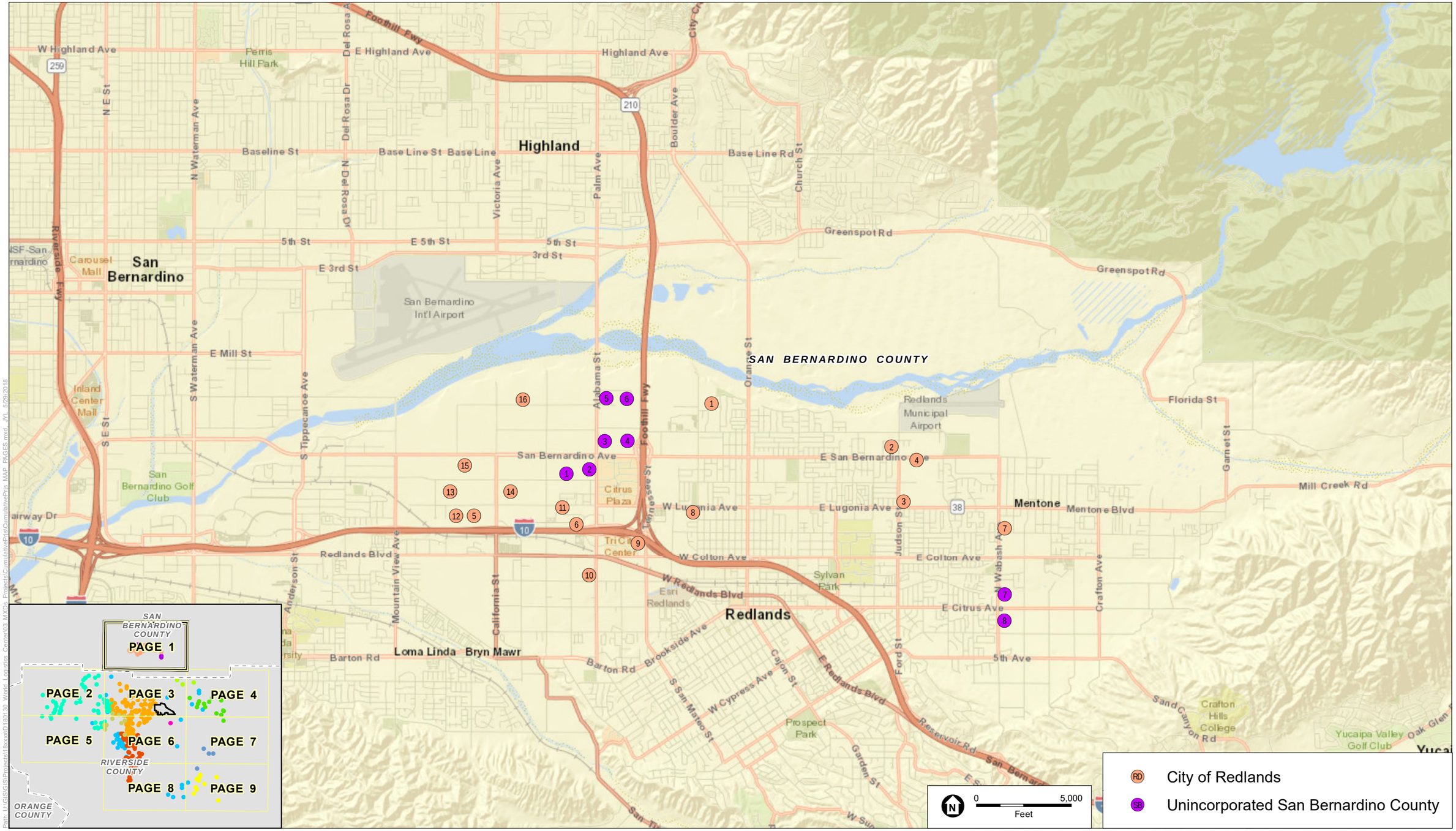

SOURCE: ESRI; Highland Fairview 3/12/2018

World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 1 of 9

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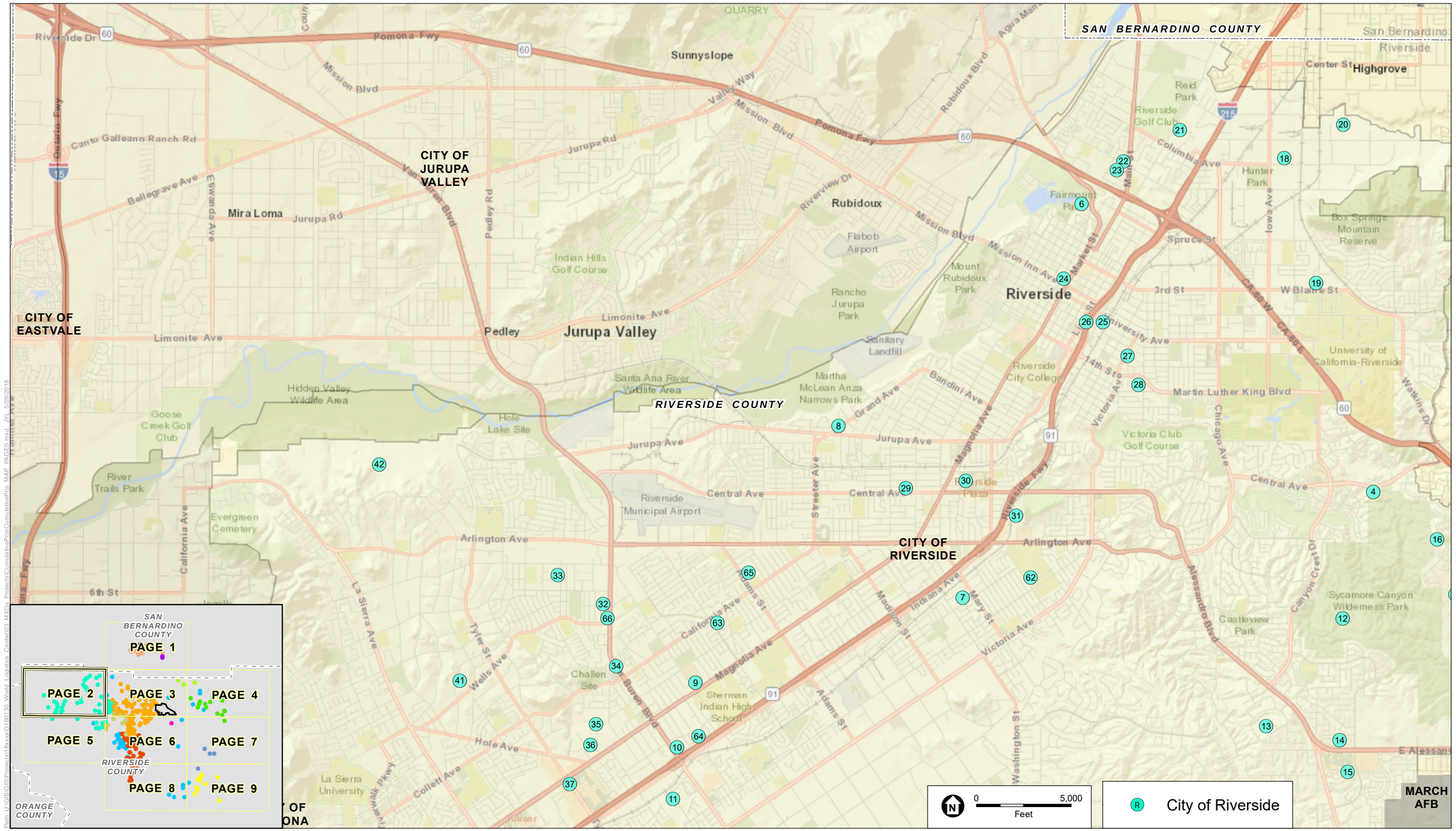

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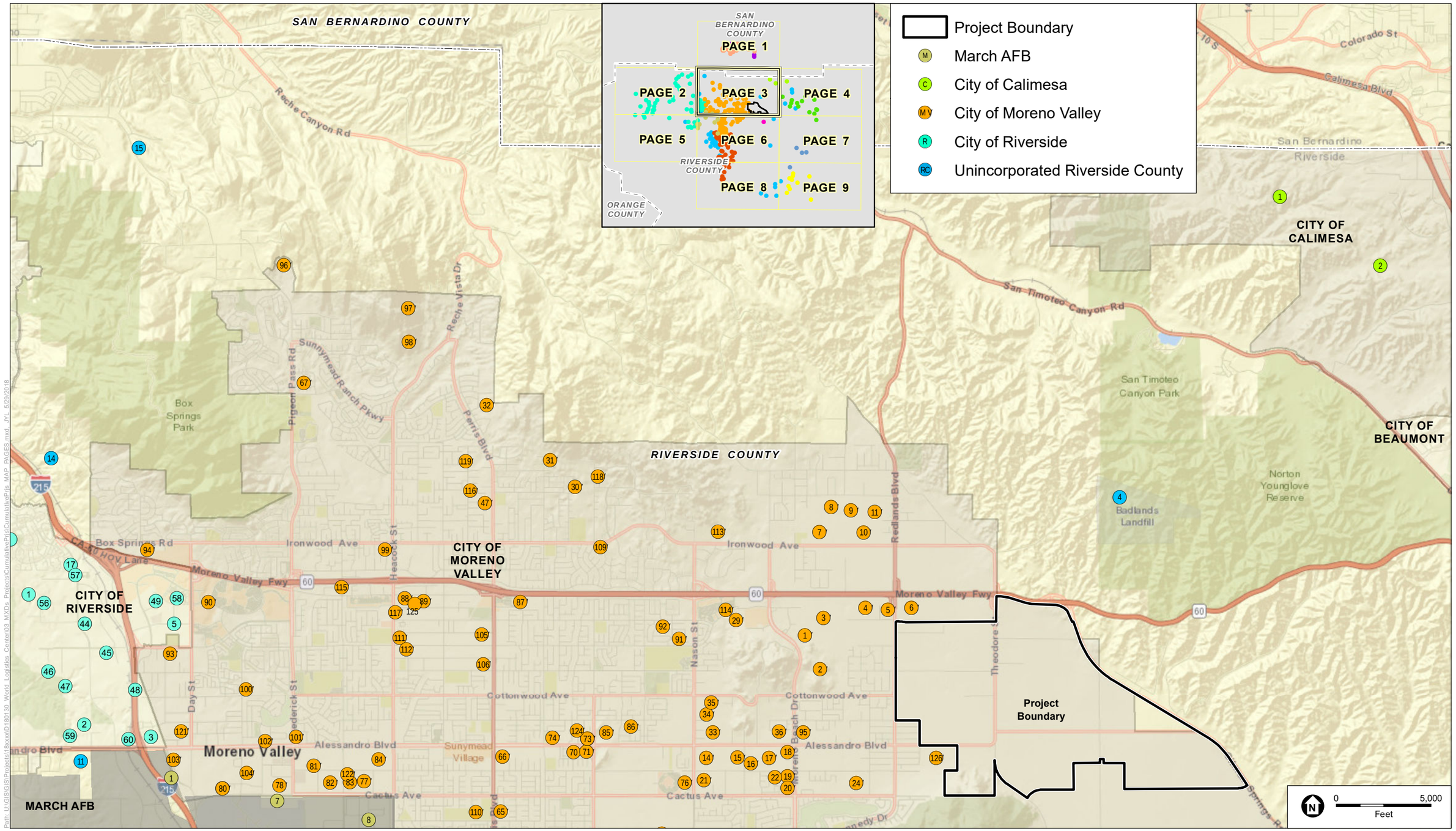
World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 2 of 9

ESA



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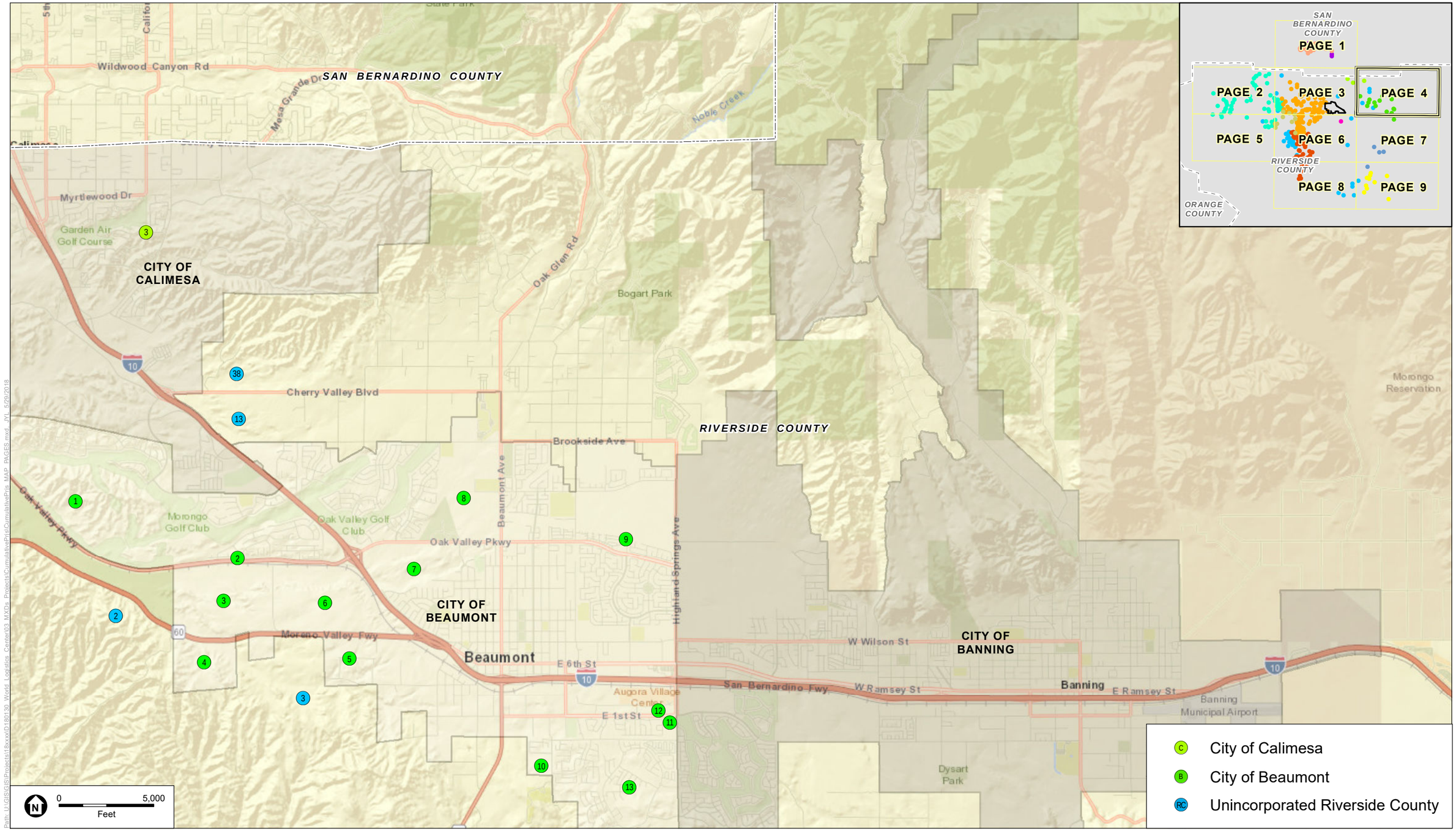
World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 3 of 9

ESA



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World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 4 of 9

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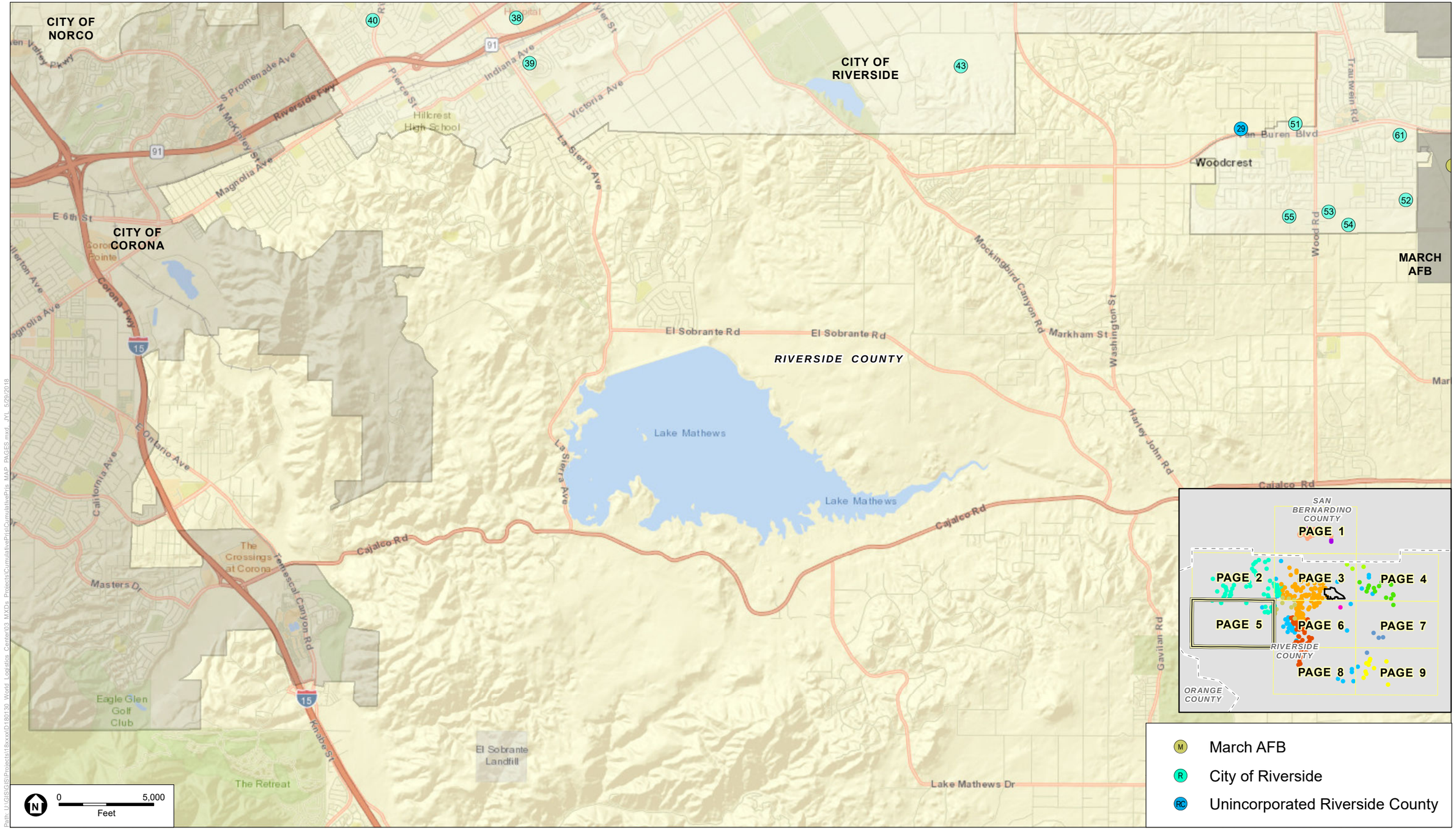

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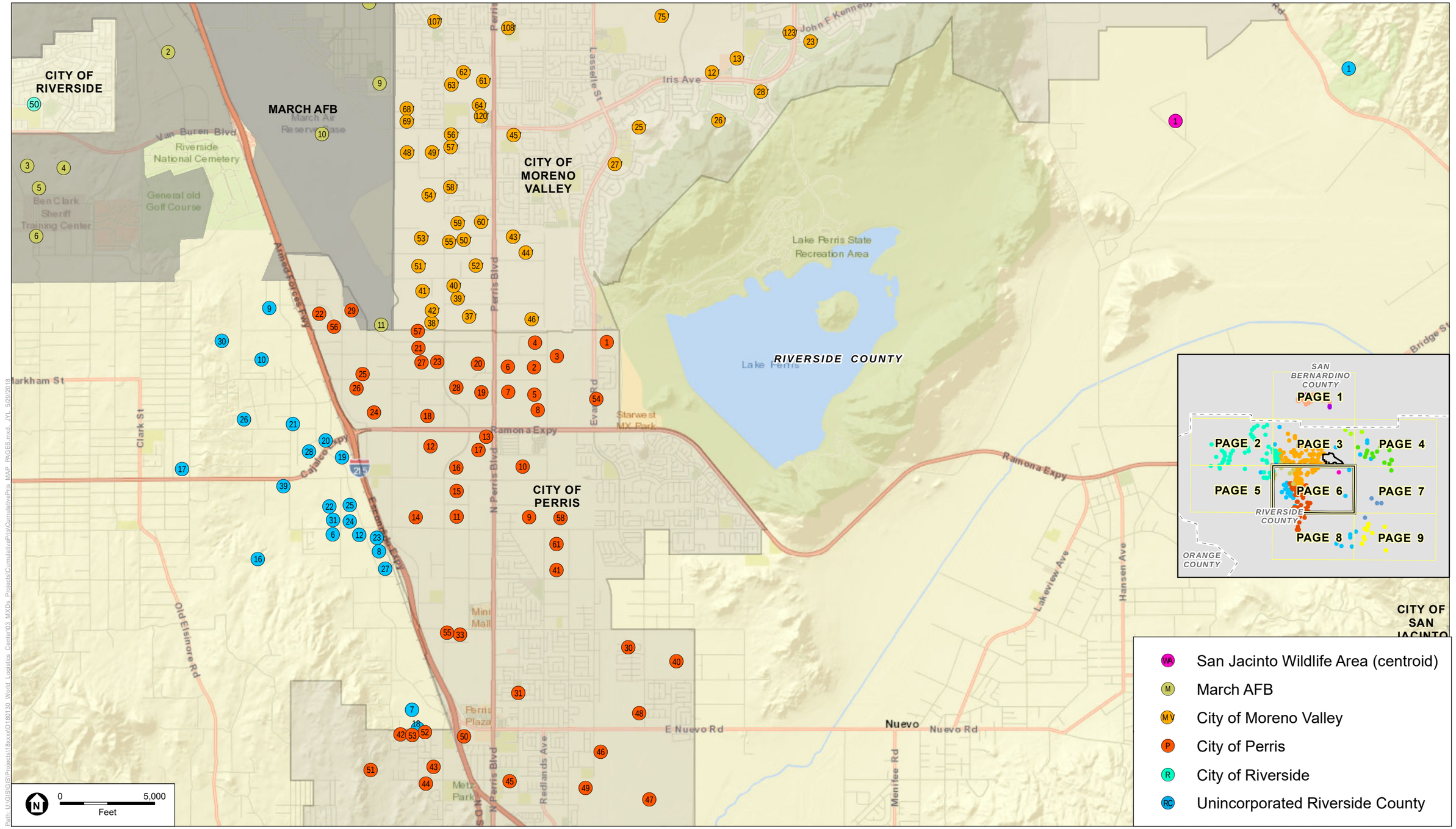
World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 5 of 9

ESA



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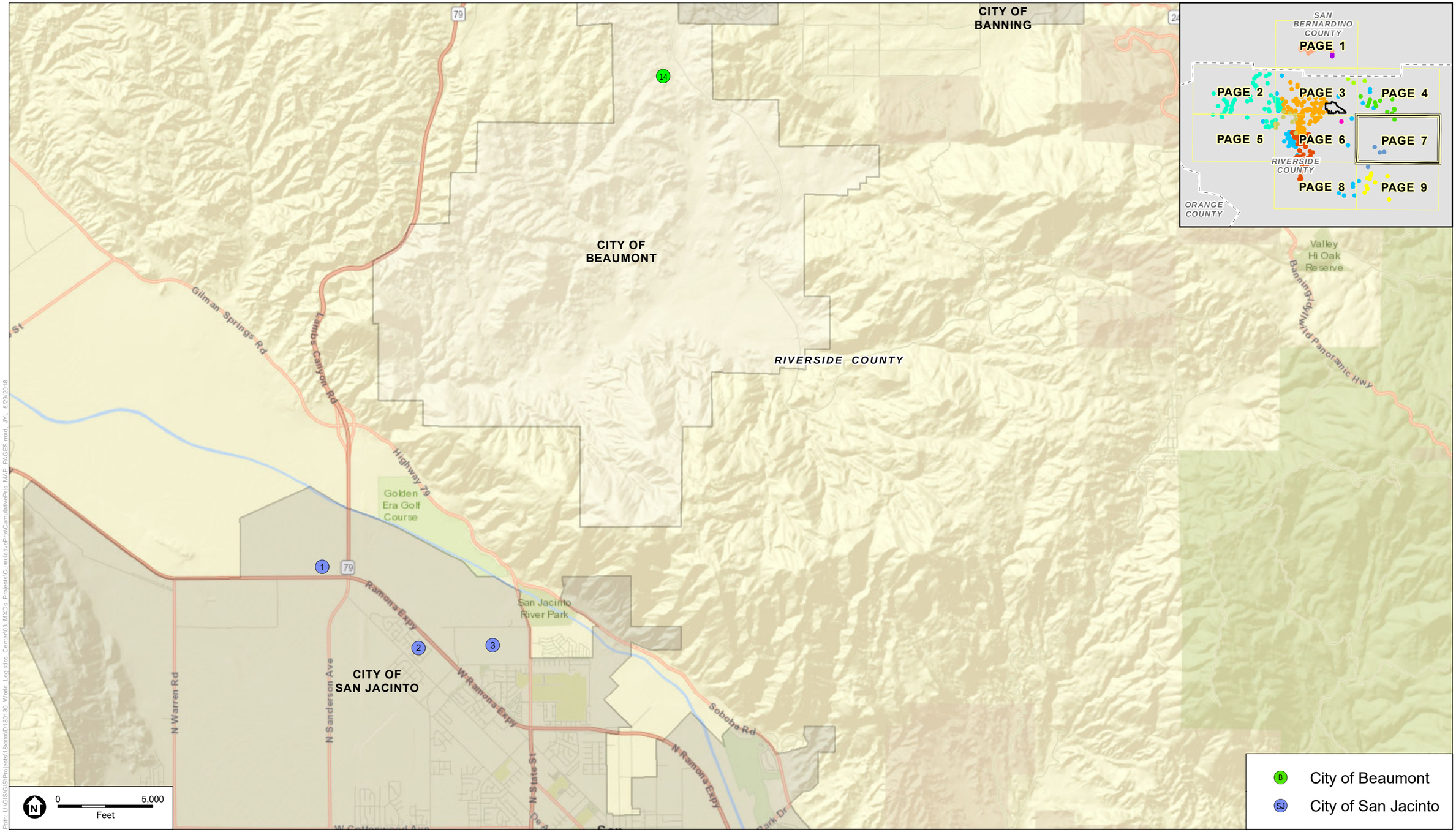
World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 6 of 9

ESA



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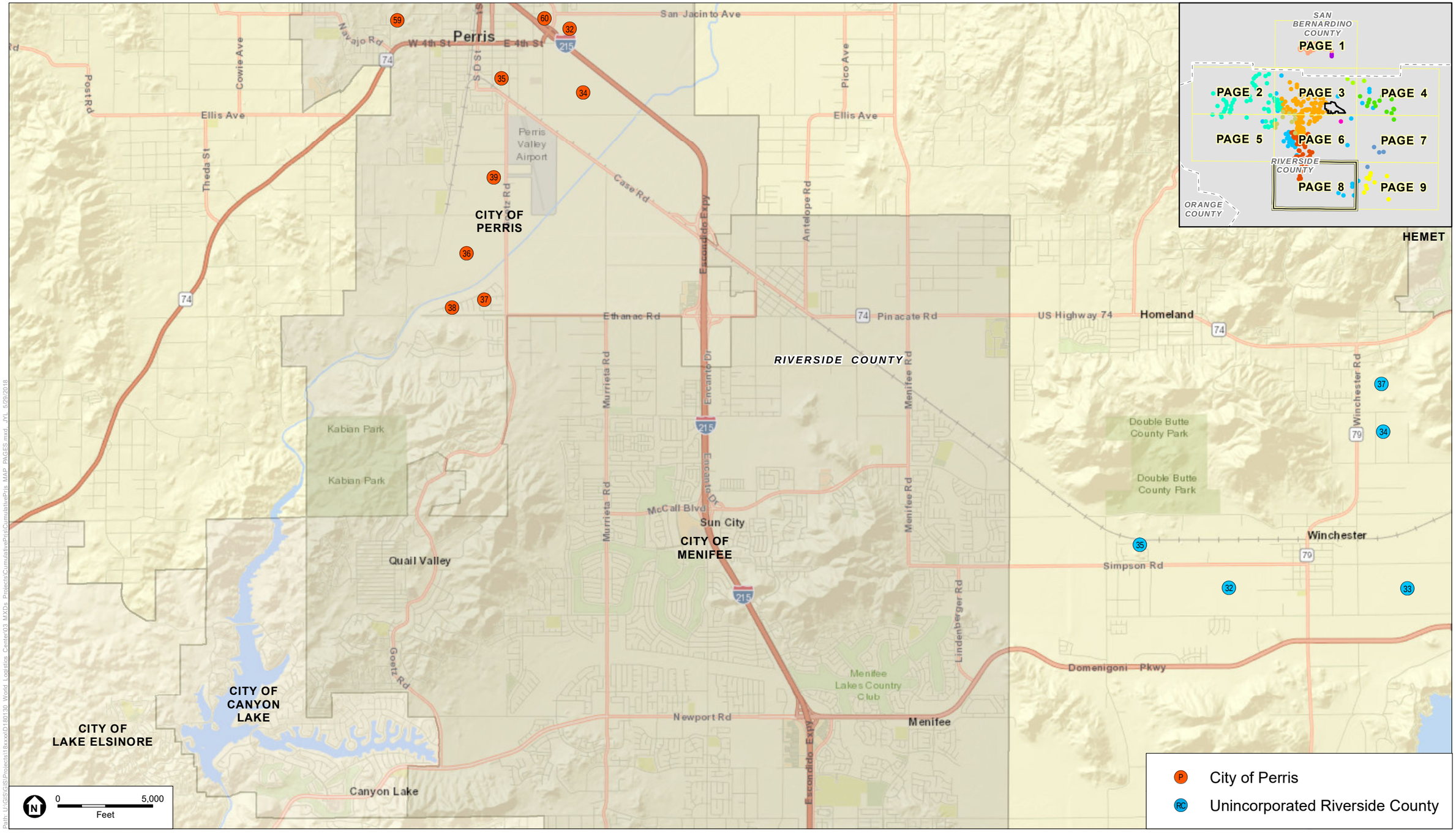
World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 7 of 9

ESA



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World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 8 of 9

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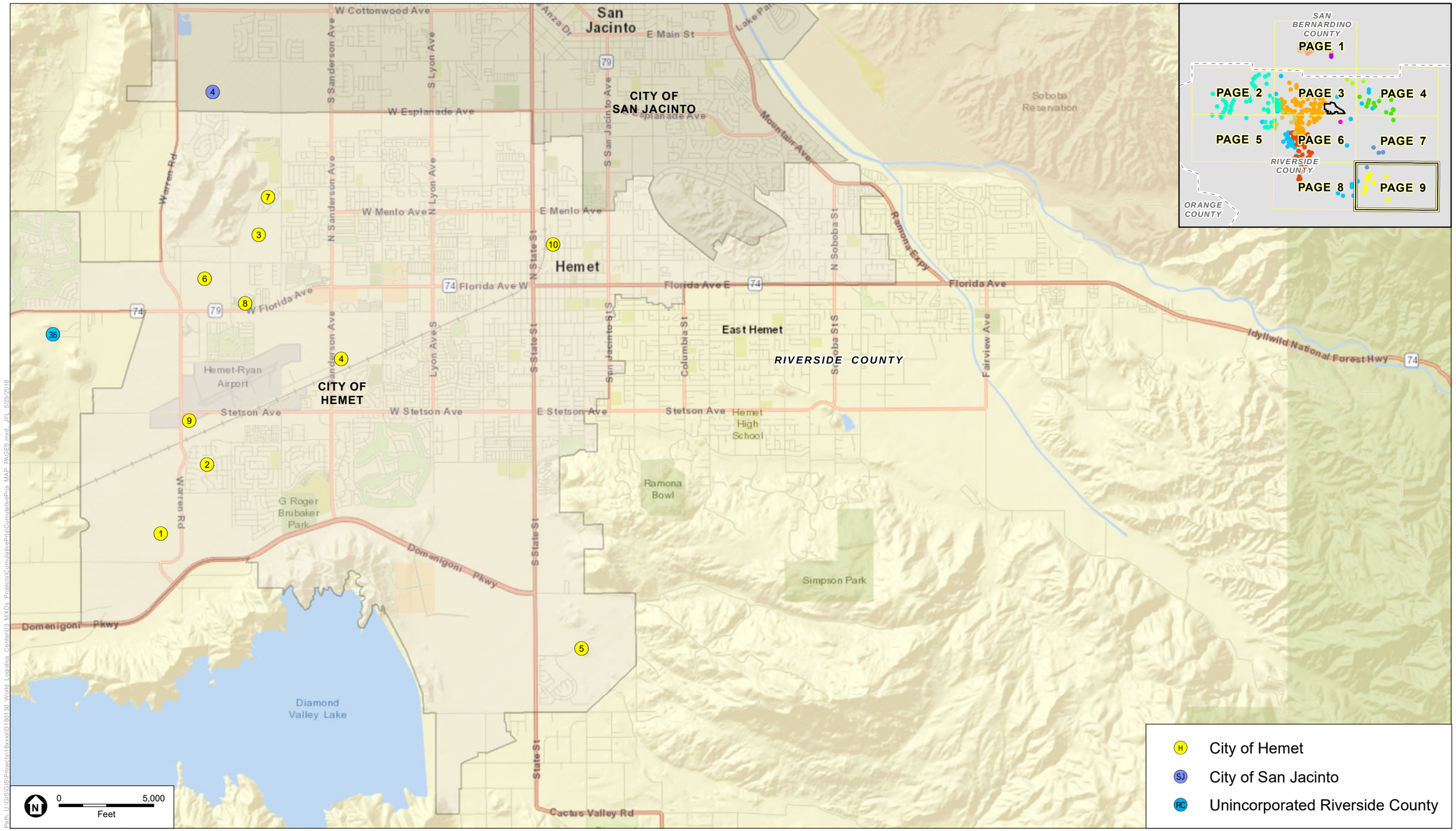

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World Logistics Center

Figure 6.0
Cumulative Projects
Map Page 9 of 9

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Table 6.0-2: List of Cumulative Projects

Project ID	Project Name	Project Summary
B-1	Fairway Canyon SCPGA Tract Nos. 31462, 36558, and 36783 (#29)	Project Withdrawn
B-2	Tournament Hills 3	No project description available.
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park.
B-6	Mountain Bridge Regional Commercial Planned Community	Project Withdrawn
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site.
B-8	Noble Creek Vistas (#10)	No environmental documentation was available for review.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres.
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses.
B-13	Four Seasons (#23) Tract Nos. 32260 and 33096	No environmental documentation was available for review.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres.
C-1	TTM 33931 Fiesta Oak Valley/Mesa Verde Estates	No environmental documentation was available for review.
C-2	Summerwind Ranch	No environmental documentation was available for review.
C-3	JP Ranch	No environmental documentation was available for review.
H-1	TTM 36841	No environmental documentation was available for review.
H-2	Rancho Diamante	No environmental documentation was available for review.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres.

Project ID	Project Name	Project Summary
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres.
H-8	Florida Promenade Residential	No environmental documentation was available for review.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space.
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet.
M-1	Amstar/Kaliber Development, PP22925	No project description available.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR , the project would result in the development of a 130 acre business park.
M-3	Meridian Business Park - Phase 3	No environmental documentation was available for review.
M-4	March Business Center - South Campus	No environmental documentation was available for review.
M-5	Meridian LNR Phase 5	No environmental documentation was available for review.
M-6	Ben Clark Training Facility	No environmental documentation was available for review.
M-7	Meridian Business Park - Phase K4	No environmental documentation was available for review.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres.
M-10	Airport Master Plan	No environmental documentation was available for review.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres.
MV-1	Auto Mall Specific Plan Planning Area C	No environmental documentation was available for review.
MV-2	TR35823 / Stowe Passco Development	Project Closed Before Environmental Review
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres.

Project ID	Project Name	Project Summary
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres.
MV-5	P06-158 / Gascon	Project Closed Before Environmental Review
MV-6	Highland Fairview, Corporate Park, (Phases 2 and 3)	No environmental documentation was available for review.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres.
MV-12	Moreno Medical Campus	No environmental documentation was available for review.
MV-13	Cresta Bella	No environmental documentation was available for review.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots.
MV-23	PEN16-0129/0130 MV Ranch Apartments	No environmental documentation was available for review.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres.

Project ID	Project Name	Project Summary
MV-26	TR 30268 (PA01-0072) Pacific Communities	No environmental documentation was available for review.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots.
MV-31	PA15-0034 TR 36983	Project Closed Before Environmental Review
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres.
MV-38	Vogel Properties	No environmental documentation was available for review.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres.
MV-40	PEN17-0036 Warehouse	No environmental documentation was available for review.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays.

Project ID	Project Name	Project Summary
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district.
MV-46	Harley Knox/Redlands Development	No environmental documentation was available for review.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space.
MV-55	MV Commerce Park II (Alere) - Built before 2012	No environmental documentation was available for review.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site.

Project ID	Project Name	Project Summary
MV-62	Tract Map 22180	No environmental documentation was available for review.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots.
MV-64	TR22180 / Young Homes	No environmental documentation was available for review.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel.
MV-70	TR32756 / CTK, Inc.	No environmental documentation was available for review.
MV-71	TR34681 / Perris Pacific Co.	No environmental documentation was available for review.
MV-72	35861 Frederick Homes	No environmental documentation was available for review.
MV-73	TR36038 / Alessandro Village Plaza LLC	Project Closed Before Environmental Review
MV-74	TR34216 / Creative Design Associates	No environmental documentation was available for review.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres.
MV-76	Commercial Medical Plaza, PA09-0033 thru 0039, and PA09-0019 & 0020	Project Closed Before Environmental Review
MV-77	Minka Lighting	No environmental documentation was available for review.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone.
MV-82	Centerpointe Bus. Ctr	No environmental documentation was available for review.
MV-83	Centerpointe Business Park	No environmental documentation was available for review.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots.
MV-87	TR31814 / Moreno Valley Investors	No project description available.

Project ID	Project Name	Project Summary
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts.
MV-90	PEN16-0110 Commercial Pad H	No environmental documentation was available for review.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision.
MV-99	36038 Alessandro Village Plaza, LLC	Project Closed Before Environmental Review
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site.
MV-101	Restaurant	No environmental documentation was available for review.
MV-102	Moreno Valley Professional Center	This project has been completed, with space available.

Project ID	Project Name	Project Summary
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres.
MV-104	373K Industrial Facility	No environmental documentation was available for review.
MV-105	35369 Tason Myers Property	N project description available.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres.
MV-107	32711 Isaac Genah	EXEMPT
MV-108	O'Reilly Automotive	No project description available.
MV-109	35530 Moreno Gilman 650, LLC-Quail Ranch	No environmental documentation was available for review.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses.
MV-115	Olivewood Plaza - Office Building	EXEMPT – No project description available.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes.
MV-120	Moreno Valley Shopping Center	No environmental documentation was available for review.
MV-121	Yum Donut Shop	EXEMPT – No project description available.
MV-122	Centerpointe Business Park	No environmental documentation was available for review.
MV-123	Rancho Belago Plaza - Retail	No project description available
MV-124	Alessandro & Lasselle	No environmental documentation was available for review.
MV-125	32756 Jimmy Lee	No environmental documentation was available for review.
MV-126	TTM 33222	No environmental documentation was available for review.
P-1	TR32707	No environmental documentation was available for review.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses.
P-3	P05-0477	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres.
P-6	Perris Circle Industrial Park	No environmental documentation was available for review.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres.
P-9	Aiere	No environmental documentation was available for review.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility.
P-13	Ridge	No environmental documentation was available for review.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres.
P-17	SRG Perris LC	No environmental documentation was available for review.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres.

Project ID	Project Name	Project Summary
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site.
P-29	P06-0411	No environmental documentation was available for review.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres.
P-33	Harvest Landing Specific Plan	No environmental documentation was available for review.
P-34	South Perris Industrial Phase 3	No environmental documentation was available for review.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility.
P-36	South Perris Industrial Phase 2	No environmental documentation was available for review.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision.
P-38	Sequoia	No environmental documentation was available for review.
P-39	South Perris Industrial Phase 1	No environmental documentation was available for review.
P-40	TR 32041	No environmental documentation was available for review.
P-41	P 06-0228	No environmental documentation was available for review.
P-42	TR 31650	No environmental documentation was available for review.
P-43	TR 31225	No environmental documentation was available for review.
P-44	TR 33193	No environmental documentation was available for review.
P-45	P 12-05-0013	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
P-46	P 06-0378	No environmental documentation was available for review.
P-47	Park West Specific Plan	No environmental documentation was available for review.
P-48	TR 33338	No environmental documentation was available for review.
P-49	TR 31240	No environmental documentation was available for review.
P-50	P 11-09-0011	No environmental documentation was available for review.
P-51	TR 30973	No environmental documentation was available for review.
P-52	TR 31226	No environmental documentation was available for review.
P-53	TR 31659	No environmental documentation was available for review.
P-54	TTM 32708 (50% Complete)	No environmental documentation was available for review.
P-55	Perris Marketplace	No environmental documentation was available for review.
P-56	PM 34199/TPM 34697	No environmental documentation was available for review.
P-57	P 04-0343	No environmental documentation was available for review.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres.
P-59	TR 31407	No environmental documentation was available for review.
P-60	Retail on San Jacinto	No environmental documentation was available for review.
P-61	Investment Development Services (IDS) II	No environmental documentation was available for review.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres.
R-3	P07-1028, -0102; and P09-0416, -0418, -0419	Per the City of Riverside's December 2009 Final EIR, the project would develop a 36.91 acre business park development for light industrial, warehouse distribution, and office uses on 80.07 acres.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed.
R-6	2450 Market Streetca (P13-0087; P13-0262)	No environmental documentation was available for review.
R-7	2861 Mary Street (P12-0442; P12-0443; P12-0444)	No environmental documentation was available for review.
R-8	5938-5944 Grand Avenue (P12-0266; P12-0267; P12-0268)	No environmental documentation was available for review.
R-9	Magnolia Avenue Specific Plan	No environmental documentation was available for review.
R-10	SR-91/Van Buren Commercial	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
R-11	Citrus Business Park Specific Plan	No environmental documentation was available for review.
R-12	Sycamore Canyon Business Park Specific Plan	No environmental documentation was available for review.
R-13	14601 Dauchy Av. - TM 36370 (P12-0601; P12-0697; P12-0698)	No environmental documentation was available for review.
R-14	360 Alessandro Boulevard (P12-0419; P12-0557; P12-0558; P12-0559)	No environmental documentation was available for review.
R-15	Mission Grove Specific Plan	No environmental documentation was available for review.
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area.
R-17	5940-5980 Sycamore Canyon Boulevard (P13-0553; P13-0554; P13-0583; P14-0065)	No environmental documentation was available for review.
R-18	Hunter Business Park	No environmental documentation was available for review.
R-19	807 Blaine Street (P09-0717; P09-0718)	No environmental documentation was available for review.
R-20	474 Palmyrita Avenue (P13-0956; P13-0959; P13-0960; P13-0963; P13-0964; P13-0965; P13-0966)	No environmental documentation was available for review.
R-21	1006 & 1008 Clark Street	No environmental documentation was available for review.
R-22	3719 Strong Street (P05-0269; P08-0416; TM 33550)	No environmental documentation was available for review.
R-23	1710 Main Street (P12-0717)	No environmental documentation was available for review.
R-24	Downtown Specific Plan	No environmental documentation was available for review.
R-25	E. of Commerce St., between Mission Inn Av. and Ninth St. (P14-0045; P14-0046; P14-0047; P14-0048; P14-0049)	No environmental documentation was available for review.
R-26	Marketplace Specific Plan	No environmental documentation was available for review.
R-27	2586 University avenue (P13-0650; P13-0651)	No environmental documentation was available for review.
R-28	2340 Fourteenth Street (P09-0808; P08-0809)	No environmental documentation was available for review.
R-29	6570 Magnolia Avenue; 3739 & 3747 Central Avenue (P13-0196; P13-0197)	No environmental documentation was available for review.
R-30	3545 Central Avenue (P12-0741; P12-0743)	No environmental documentation was available for review.
R-31	NWC of Dominion Avenue and Division Street (P08-0396; P08-0397; P08-0398; P08-0399; TM 35620)	No environmental documentation was available for review.
R-32	5200 Van Buren Boulevard (P09-0600; P09-0601; Walmart Expansion)	No environmental documentation was available for review.
R-33	5731, 5741, 5761 & 5797 Pickler Street (P13-0198; P13-0199; P13-0200; P13-0201)	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
R-34	4247 Van Buren Boulevard (P13-0785; P13-0787)	No environmental documentation was available for review.
R-35	3990 Reynolds Road (P12-0021; P12-0022; P12-0074; PM 36442)	No environmental documentation was available for review.
R-36	3875 Dawes Street (P10-0438; Magnolia Garden Condominiums)	No environmental documentation was available for review.
R-37	3705 Tyler Street (P13-0501; P13-0502)	No environmental documentation was available for review.
R-38	Park Sierra Avenue (P14-0026; P14-0027)	No environmental documentation was available for review.
R-39	Riverwalk Vista Specific Plan	No environmental documentation was available for review.
R-40	NWC of Riverwalk Parkway and Flat Rock Drive (P12-0019; P12-0156; P12-0158)	No environmental documentation was available for review.
R-41	4824 Jones Avenue (P13-0181; P13-0182)	No environmental documentation was available for review.
R-42	Rancho La Sierra Specific Plan	No environmental documentation was available for review.
R-43	E. of Gratton St., W. of Corsica Av., N. of Van Buren Bl. (P05-1528; P09-0087; TM 34509)	No environmental documentation was available for review.
R-44	6465 Sycamore Canyon Boulevard	No environmental documentation was available for review.
R-45	P06-0591	No environmental documentation was available for review.
R-46	Sycamore-Highlands Specific Plan	No environmental documentation was available for review.
R-47	P06-0160/P06-1281	No environmental documentation was available for review.
R-48	P06-1408	No environmental documentation was available for review.
R-49	Canyon Springs Specific Plan	No environmental documentation was available for review.
R-50	Orangecrest Specific Plan	No environmental documentation was available for review.
R-51	N. of Van Buren Boulevard; W. of Wood Street (P10-0808; P10-0708)	No environmental documentation was available for review.
R-52	19811 Lurin Avenue (P06-1355; TM 33480)	No environmental documentation was available for review.
R-53	APN:266140002, 021, 022 (P06-1404; Lurin Avenue; TM 33482)	No environmental documentation was available for review.
R-54	APN:266140029, 030 (P06-1396; Mariposa Avenue; TM 33481)	No environmental documentation was available for review.
R-55	SWC of Lurin Avenue and Wood Road (P06-0900; P08-0269; P08-0270; TTM 32301)	No environmental documentation was available for review.
R-56	Office, Magnon & Panattoni	No environmental documentation was available for review.
R-57	SEC Sycamore Canyon Boulevard & Box Springs Road (P13-0607; P13-0608; P0609; P13-0854)	No environmental documentation was available for review.
R-58	Canyon / Valley Springs Parkway	No environmental documentation was available for review.
R-59	Alessandro and Gorgonio	No environmental documentation was available for review.
R-60	Alessandro Bl. (APN 263-091-008; 263-100-019; 263-100-005; P14-0841 to 0848)	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
R-61	Gless Ranch	No environmental documentation was available for review.
R-62	6091 Victoria Avenue (P13-0432)	No environmental documentation was available for review.
R-63	8616 California Avenue (P08-0084; PM 35852)	No environmental documentation was available for review.
R-64	P13-0389; TM36579	No environmental documentation was available for review.
R-65	P13-0723; P13-0724; P13-0725; TM 36654	No environmental documentation was available for review.
R-66	Azar Plaza	No environmental documentation was available for review.
RC-1	TR35530 / Quail Ranch Specific Plan	No environmental documentation was available for review.
RC-2	Jack Rabbit Trail	Project Withdrawn
RC-3	The Preserve / Legacy Highlands SP - Residential	No project description available.
RC-4	Badlands Sanitary Landfill	No environmental documentation was available for review.
RC-5	Villages of Lakeview - Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project.
RC-6	Rider Business Center (Core 5 Industrial Partners)	No environmental documentation was available for review.
RC-7	Nuevo Distribution Center	No environmental documentation was available for review.
RC-8	Trucking DC (Central Freight, LLC)	No environmental documentation was available for review.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres.
RC-14	University Highlands	No environmental documentation was available for review.
RC-15	TTM 33410 Box Springs	No environmental documentation was available for review.
RC-16	Rider Street Quarry	No environmental documentation was available for review.
RC-17	PP 24608	No environmental documentation was available for review.

Project ID	Project Name	Project Summary
RC-18	TR 32406	No environmental documentation was available for review.
RC-19	CUP 03599	No environmental documentation was available for review.
RC-20	PP 25699	No environmental documentation was available for review.
RC-21	CUP 03527	No environmental documentation was available for review.
RC-22	TR30592	No environmental documentation was available for review.
RC-23	PP 25768	No environmental documentation was available for review.
RC-24	PP 21144	No environmental documentation was available for review.
RC-25	PP 16976	No environmental documentation was available for review.
RC-26	PM 32699	No environmental documentation was available for review.
RC-27	Yocum Baldwin	No environmental documentation was available for review.
RC-28	CUP03315	No environmental documentation was available for review.
RC-29	18580 Van Buren Boulevard (P08-0402; P13-0822)	No environmental documentation was available for review.
RC-30	Knox Logistics	No environmental documentation was available for review.
RC-31	PP23342	No environmental documentation was available for review.
RC-32	TR31537	No environmental documentation was available for review.
RC-33	TR34130	No environmental documentation was available for review.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space.
RC-36	TR36478, TR36480, PP25219	No environmental documentation was available for review.
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space.
RC-39	Tract 33869	No environmental documentation was available for review.
RD-1	Tract 18988	Per the City of Redlands' June 2015 MND, the project would widen Pioneer Avenue to preserve existing deodar cedar trees along an approximately 1,100 linear foot segment between Texas Street and Furlow Drive. The project also would develop 82 single-family residential lots on 30.51 acres.
RD-2	Redlands Pioneer Tract	No project description available.
RD-3	Newland Homes Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the construction of 105 single family detached dwelling units and a neighborhood park on 39.84 acres.

Project ID	Project Name	Project Summary
RD-4	Redlands Pennsylvania Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the subdivision of a 24.87 acre project site into 67 residential lots and 10 lots as open space. Additionally the Project seeks approval to remove 5 acres from an Agricultural Preserve.
RD-5	I-10 Redlands LC - A	No project description available
RD-6	Woodsprings Hotel	Per the City of Redlands' March 2018 IS, the Project would result in the construction of a 124-room hotel on a 2.68-acre property.
RD-7	RV Storage Facility	No environmental documentation was available for review.
RD-8	Liberty Lane Apartments	No environmental documentation was available for review.
RD-9	Hilton Home2 Suites	No environmental documentation was available for review.
RD-10	Park Ave Industrial Center	Per the City of Redlands' March 2014 MND, the project would develop approximately 170,000 square feet of light industrial uses, including 289 parking spaces and 12, 500 square feet of office space.
RD-11	Marriott Springhill Suites	Per the August 2016 technical memorandum regarding the Trip Generation, Distribution, and Assignment Analysis for the project, the project would develop a four-story 88-room hotel with rooms, suites, and 97 parking spaces.
RD-12	I-10 Redlands LC - B	Per the August 2014 letter responding to comments on the proposed MND, the project would develop approximately 1.1 million square feet for warehousing/ fulfillment/distribution center uses on 50.67 acres.
RD-13	Ashley Furniture	No project description available.
RD-14	Redlands DC 772,000 SF (2015)	Per the City of Redlands' September 2013 MND, the project would develop 771,839 square feet of warehouse distribution center on 35.59 acres and related parking.
RD-15	2220 Almond Ave	No environmental documentation was available for review.
RD-16	APL Logistics	Per the May 2012 City of Redlands Commission Review and Approval No. 873, the project would develop 809,338 square feet of warehouse uses on 37.4 acres.
SB-1	Redlands Gateway Logistics - B	Per the County of San Bernardino's 2009 IS, the project would result in the construction of 5 two-story structures and 7 single-story structures with a maximum floor area of 216,500 square feet, and a three-story hotel with 180 rooms and a floor area of 80,000 square feet.
SB-2	Redlands Gateway Logistics - A	Per the County of San Bernardino's 2014 IS, the project proposes to subdivide 42.66 acres into 2 lots. Parcel 1 is 14.81 acres and Parcel 2 is 27.85.
SB-3	Prologis #12	Per the County of San Bernardino's 2013 IS, the project would result in a conditional use permit to establish a 593,916 square-foot industrial building to be use as a "high cube" warehouse distribution facility, a tentative parcel map for a one lot subdivision, and a general plan amendment to change the official land use district from East Valley/General commercial to East Valley/regional industrial on 27.42 acres.
SB-4	Prologis #17	Per the County of San Bernardino's April 2014 MND, the Project would result in the construction of a 777,620 square foot industrial building and the relocation of an existing telecommunication tower on a 35.98 acre site.
SB-5	Prologis #13	No environmental documentation was available for review.
SB-6	Prologis #8	Per the County of San Bernardino's 2007 IS, the project would result in the construction four industrial buildings to be used a "High Cube" and general warehouse distribution facilities.

Project ID	Project Name	Project Summary
SB-7	Sam Redlands Tract	Per the City of Redlands' March 2017 ISMND, the Project would result in the subdivision of an 11.97 acre site into 34 single family residential lots, 4 lettered lots, and the demolition of existing structures.
SB-8	Jacinto Tract	Per the City of Redlands' July 2016 ISMND, the Project would result in the subdivision of an 18.54 acre site into 40 residential lots.
SJ-1	Gateway Area Specific Plan	No environmental documentation was available for review.
SJ-2	TR31886 - Under Construction	No environmental documentation was available for review.
SJ-3	TR30598 (SP 1-03)	No environmental documentation was available for review.
SJ-4	TR32955 (SP 1-02)	No environmental documentation was available for review.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking.

6.0.6 Analysis of Cumulative Impacts

The analysis of each environmental issue/topic (Sections 6.1 – 6.17) evaluates the cumulative impacts of the project in conjunction with the identified potentially cumulative projects based on the projects' potential to cause impacts that overlap geographically and temporally. Implementation of the mitigation measures identified in each specific section of the 2015 FEIR in conjunction with new mitigation measures from the Revised Sections of the FEIR will reduce the cumulative impact of the project to the extent feasible. In many cases, the mitigation measures result in reducing the project's cumulative impact to a less than significant level. For other impacts, the implementation of the identified mitigation measures will not avoid a significant cumulative impact. The seventeen subsections of Chapter 6.00 (i.e., 6.1 - 6.17) identify those significant, unavoidable cumulative impacts that will not be reduced to a less than significant level. In addition, the analyses indicate to what degree the project makes a significant (i.e., cumulatively considerable) contribution to significant cumulative impacts for each environmental topic.

This analysis considers the impacts of the project in combination with the potential environmental effects of other projects in the identified area. "Other projects," also referred to as "cumulative projects," include the ongoing impacts of past projects (which are reflected in the resource-specific descriptions of baseline conditions) and anticipated impacts of recently completed projects, projects currently under construction or the lead agency's consideration, and reasonably foreseeable probable future projects currently in development. The potential for projects to have a cumulative impact depends on their geographic location, size, land use type, and development schedule.

6.0.6 Geographic Scope

The project area is located in the eastern portion of the City of Moreno Valley. The potential for specific project-generated impacts to contribute to a significant cumulative impact would occur if the impacts of the project and other potentially cumulative projects are located within the same geographic area. This geographic area varies depending upon the resource area being evaluated (water quality, noise, etc.) and the geographic extent of the potential impact. For example, the geographic area associated with construction noise impacts would be limited to areas where construction noise from the project could be heard at the same time as noise from other projects could be heard. In contrast, the geographic area that could be affected by the project and cumulative construction-related traffic would include the western portion of Riverside County. Each topic evaluated in Section 6.0 of the Revised Sections of the FEIR has developed a specific geographic cumulative project impact area, based on the potential for cumulative impacts to occur, and includes individual tables summarizing the specific cumulative projects and a figure depicting the boundary of the cumulative project evaluation area and the location of the cumulative projects.

6.0.6 Project Timing

In addition to the geographic scope, cumulative impacts are determined by the timing of the generation of similar impacts by other projects relative to the project. Although the timing of the future projects is likely to fluctuate due to schedule changes or other unknown factors, this analysis assumes these individual projects would be developed for implementation through the course of the current planning horizon and could be implemented concurrently with construction of the project. The worst case planning horizon year is 2040.

6.1 Aesthetics

Cumulative effects to aesthetics are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to aesthetics is provided in Section 6.1.1. The geographic and temporal scopes for cumulative impacts to aesthetics are provided in Section 6.1.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the aesthetics issues are discussed in Section 6.1.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.1.3 below as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact to aesthetics.

6.1.1 Project Impact Findings

The project's effects to aesthetics are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project's impacts (see Section 4.1 of the Revised Sections of the FEIR is provided as well as a reference to the specific section and impact number if the impact determination is significant.

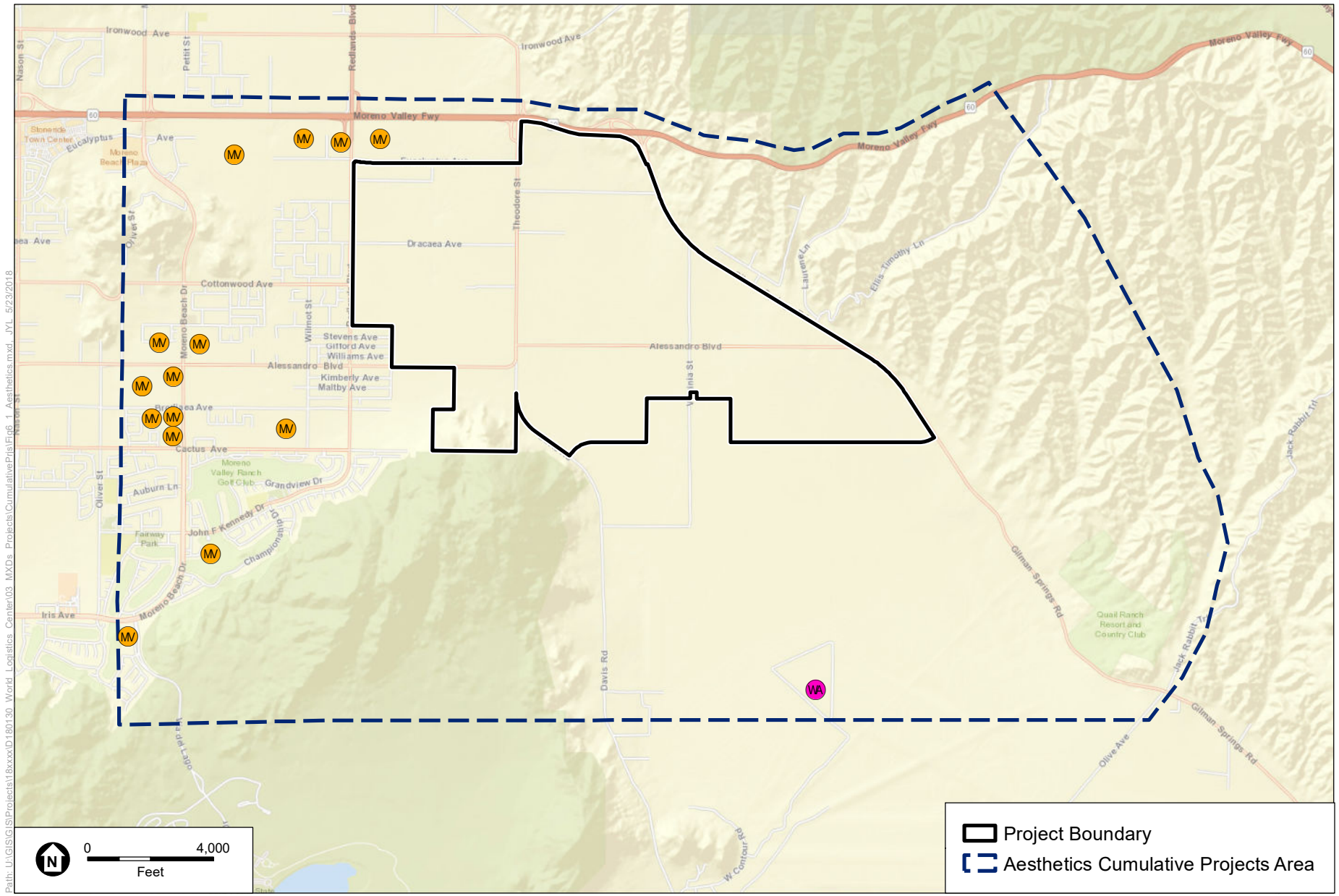
Would the project:

- Have a substantial adverse effect on a scenic vista? **Significant and Unavoidable with Mitigation, Section 4.1.6.1, Impact 4.1.6.1.**
- Result in substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway and/or local scenic road? **Significant and Unavoidable with Mitigation, Section 4.1.6.2, Impact 4.1.6.2.**
- Result in substantial degradation of the existing visual character or quality of the site and its surroundings? **Significant and Unavoidable with Mitigation, Section 4.1.6.3, Impact 4.1.6.3.**
- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? **Less than Significant with Mitigation, Section 4.1.6.4, Impact 4.1.6.4.**

6.1.2 Geographic and Temporal Scope

The cumulative impact geographic area for aesthetics has been identified from the perspective of prominent public vantage points from which viewers could see the project, including public roads within

and surrounding the project site, SR-60, Gilman Springs Road, Theodore Street, and Redlands Boulevard. See Figure 6.1. The views within the geographic area that could be altered by the project in combination with other projects include views of Mount Russell and the foothills surrounding the Lake Perris State Recreation Area, the Badlands east of Gillman Springs Road, and The San Jacinto Wildlife Area that includes Mystic Lake and associated wetlands. The prominent vantage points include SR-60 to the north, Gilman Springs Road to the east, Moreno Beach Drive to the west and the Lake Perris State Recreation area and San Jacinto Wildlife Area to the south. These prominent vantage points in the vicinity of the project site define the geographic area where public views could be altered. Public views beyond the prominent vantage points do not include the project site and therefore are not part of the cumulative aesthetics impacts geographic area. The geographic area for cumulative aesthetics and views impacts is shown on Figure 6.1-1. The projects located within the cumulative aesthetics impact area are listed in Table 6.1-1. The project would contribute to cumulative aesthetic conditions starting with project-related alteration of on-site conditions and lasting for the duration of the project.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.1-1

Aesthetics Cumulative Projects Area

ESA

Table 6.1-1: Aesthetics Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
MV-3	ProLogis	As described in the project's 2014 EIR, the development of 2,244,638 square feet of distribution warehouse space would have a significant and unavoidable impact on aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare) and could contribute to cumulative impacts to aesthetic resources due to the degree of visual change introduced by the project.
MV-4	Westridge Commerce Center	The visual change introduced by the development of a 937,260 square foot warehouse distribution facility could contribute to cumulative impacts on aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare)
MV-17	TR31590 / Winchester Associates	The Project's subdivision of 30 acres for 96 single family homes could contribute to cumulative impacts to aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare) due to the visual change introduced by the Project.
MV-18	Convenience Store/Fueling Station	The Project's construction of a fueling station and convenience store would contribute to cumulative impacts to aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare) due to the visual change introduced by the Project.
MV-19	Senior Assisted Living	The Project's building of a 139-unit senior assisted living facility would contribute to the cumulative light and glare in the geographic area due to new sources of lighting and reflective surfaces.
MV-20	Moreno Marketplace	The Project's development of 95,905 square foot retail center would contribute to the cumulative light and glare in the geographic area due to new sources of lighting and reflective surfaces.

Project ID	Project Name	Environmental Document Summary
MV-22	TR36882 (PA15-0010) SFR	The Project's subdivision of 9.4 acres into 40 residential lots would contribute to the cumulative light and glare in the geographic area due to new sources of lighting and reflective surfaces.
MV-24	TM 36436 (PA12-0005)	The Project's subdivision of 43.52 acres into 159 single family residential lots would contribute to cumulative impacts to aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare) due to the visual change introduced by the Project.
MV-28	TR34329 / Granite Capitol	The Project's development of 90 condominiums on 10.41 acres would contribute to the cumulative light and glare in the geographic area due to new sources of lighting and reflective surfaces.
MV-36	TM 31618 (PA03-0106)	The Project's subdivision of 18.99 acres into 56 single family residential lots would contribute to cumulative impacts to aesthetic resources in the geographic area (including visual character and light and glare) due to the visual change introduced by the Project
MV-95	Moreno Beach Marketplace/ Lowes	The Project's development of retail space on 14.2 acres would contribute to cumulative impacts to aesthetic resources in the geographic area (including scenic vistas, visual character, and light and glare) due to the visual change introduced by the Project
SJWA-1	San Jacinto Wildlife Land Management Plan	The Project's development of a land management plan would contribute to cumulative impacts to aesthetic resources in the geographic area (including scenic vistas, scenic resources and highways, visual character, and light and glare) due to the visual change introduced by the Project.

6.1.3 Cumulative Impact Evaluation

6.1.3.1 Scenic Vistas

Impact: *The project's contribution to cumulative impacts to scenic vistas would be cumulatively considerable.*

Threshold:	Would the project have a substantial adverse effect on a scenic vista?

Cumulative Impact Analysis

Scenic vistas adversely impacted by the project include views of Mount Russell and the foothills surrounding the Lake Perris State Recreation Area, the Badlands, the San Jacinto Wildlife Area and the valley floor. Features of the existing development landscape that adversely affect views of these resources for travelers eastbound and westbound on SR-60 include the existing Skechers warehouse building located adjacent to the northwestern boundary of the project site.

For travelers eastbound on SR-60, the project together with cumulative projects MV-3, MV-4, MV-6, and MV-95 could potentially reduce views of Mount Russell and the foothills surrounding the Lake Perris State Recreation Area, the Badlands, the San Jacinto Wildlife Area and the valley floor. For travelers westbound on SR-60, the project together with cumulative projects MV-3, MV-4, MV-20, MV-95 and the existing Skechers could reduce views of Mount Russell and the foothills surrounding the Lake Perris State Recreation Area. Views from Gilman Springs Road, and other local roadways could be altered by the development of the project in combination with some or all of the cumulative projects. Environmental documents for MV-3 and MV-4 both identified scenic vistas as being significant and unavoidable impacts and that both projects would have cumulative impacts. Both MV-3 or MV-4 identified that there were no feasible measures to reduce impacts on the scenic vistas. MV-3 and MV-4 are considered large warehouse projects with structures and uses that would be similar in character to the structures and uses of the project. Many of the remaining cumulative projects within the cumulative geographic area for aesthetics include residential or commercial type projects, and the associated environmental documents found the impacts to be less than significant. Because there are cumulative projects that would result in significant and unavoidable impacts to scenic vistas, the cumulative development within the cumulative geographic areas for aesthetics would result in significant cumulative impacts associated with scenic vistas.

Views of the project site by the motoring public from SR-60, Gilman Springs Road, and other local roadways will change from open agricultural lands to logistics buildings and associated parking areas, roadways, infrastructure, and landscaping. Specifically, travelers in both directions on SR-60 will have views of the project site until the northernmost portion of the site is developed. If all future buildings of the project proposed along the south side of SR-60 block views to the same degree as the existing logistics building, this would create a significant visual impact as it would impact views of Mount Russell, the foothills surrounding the Lake Perris State Recreation Area, and the Badlands along Gilman Springs Road and the valley floor. Travelers in both directions on Gilman Springs Road have views across the project site. If future WLC buildings along Gilman Springs Road block views to the same degree as the Skechers building impacts views from SR-60, there would be a significant impact to the views of Mount Russell and the Mystic Lake area. Views from nearby residences could change as foreground and mid-ground views would change from vacant marginal agricultural land to trees, ornamental landscaping, and new logistics buildings. Most background views from nearby residences will be affected as well as distant views of the Badlands and Mount Russell. As discussed in Section 4.1.6.1 of the FEIR, the development of the project will substantially affect scenic vistas for residents living within, or in the vicinity of the project, and for travelers on SR-60, Gilman Springs Road, Redland Boulevard, Theodore Street, and Alessandro Boulevard. Because the project would result in significant impacts on scenic vistas, the project's contribution to cumulative impacts to scenic vistas would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.1.6.1A through 4.1.6.1D is required.

Significance Level After Mitigation: Significant and unavoidable impact. The size, height, and location of buildings within the project site are limited by the standards and guidelines contained in the WLC Specific Plan. Mitigation Measures 4.1.6.1A through 4.1.6.1D are recommended to reduce impacts related to the loss of public and private views. After implementation of the proposed mitigation measures, adverse effects on scenic vistas would remain significant and unavoidable due to the change in views for residents within and surrounding the project site, for travelers on SR-60, Gilman Springs

Road, Theodore Street, and Redlands Boulevard. Therefore, the project's contribution to cumulative impacts to scenic vistas would be considered cumulatively significant and unavoidable.

6.1.3.2 Scenic Resources and Scenic Highways

Impact: *The project's contribution to cumulative impacts on the views of scenic resources for motorists traveling on SR-60 and Gilman Springs Road would be cumulatively considerable.*

Threshold:	Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway and/or local scenic road?

Cumulative Impact Analysis

The project in conjunction with the cumulative development could have a substantial effect on scenic resources for motorists traveling on SR-60 and Gilman Springs Road. According to Section 4.1.6.2 of the FEIR, the Caltrans Scenic Highway Program does not identify any scenic highways near the project site. However, the City of Moreno Valley identifies SR-60, Gilman Springs Road, and Moreno Beach Drive as local scenic roads. According to the City's General Plan EIR, major scenic resources within the City are visible from SR-60, Gilman Springs Road, and Moreno Beach Drive. Existing views for motorists traveling eastbound and westbound on SR-60 consist of agricultural fields in the foreground and midground, and the Badlands and Mount Russell in the background. Existing views for motorists on Gilman Springs Road consist of agricultural fields in the foreground, the San Jacinto Wildlife Area and the Badlands in the background. Views for motorists traveling northbound and southbound on Moreno Beach Drive includes agricultural fields and residential uses in the foreground and midground, and the Badlands and Mount Russell and the foothills surrounding the Lake Perris State Recreation Area in the background. The related projects located along SR-60 would alter views of the agricultural fields in the foreground and mid-ground as well as the background views of the Badlands and Mount Russell. This alteration of views along SR-60 from the implementation of the cumulative related projects such as MV-3 and MV-4 could be cumulatively significant, but the environmental document for MV-4 did not identify an individual or cumulative significant visual impact. In addition, alteration of views along Moreno Beach Drive from the implementation of cumulative related projects such as MV-95 could be cumulatively significant. The environmental document for MV-95 found it to be individually and cumulatively less than significant at the time of its publication. Based on a brief review of both projects, these two related projects could result in a significant combined visual impacts along Moreno Beach Drive. In summary, the cumulative projects could result in significant visual impacts for motorists along SR-60, Moreno Beach Drive and Gilman Springs Road.

According to Section 4.1.6.2 of the FEIR, development of the project would significantly alter existing views by introducing new logistics buildings and associated parking areas, roadways, infrastructure, and landscaping adjacent to SR-60 and Gilman Springs Road, but not along Moreno Beach Drive. The project meets the Caltrans' criteria in both the moderate and major visual intrusion categories. The characteristics of a "moderate intrusion" includes increased number of buildings, but complementary to the landscape; smaller setbacks and lack of roadway screening; buildings that do not degrade or obstruct a scenic view. The characteristics of a "major visual intrusion" includes dense and continuous development; highly reflective surfaces; buildings poorly maintained; visible blight; development along ridgelines; or buildings that degrade or obstruct a scenic view. Since the project meets both criteria, the project may create a significant visual impact for motorists traveling along SR-60 and Gilman Springs Road. The project would not be visible from Moreno Beach Drive, and therefore, no impact to motorist's views would occur.

Because the project could result in significant visual impacts for motorists along SR-60, and cumulative projects such as MV-3 and MV-4 could also result in significant visual impacts for motorists along SR-60, the project's contribution to cumulative impact along SR-60 would be cumulatively considerable. In addition, because the project would result in significant visual impacts for motorists along Gilman

Springs Road and the cumulative project RC-1 could also result in significant visual impacts for motorists along SR-60, the project's contribution to cumulative visual impacts along Gilman Springs Road would be cumulatively considerable. Although cumulative related projects MV-1 and MV-95 could result in significant visual impacts to motorists along Moreno Beach Drive, the project would not contribute to any visual impact to motorists' views. Therefore, the project would result in no cumulative impact to visual resources that can be viewed from Moreno Beach Drive.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.1.6.1A through 4.1.6.1D would be required.

Significance Level After Mitigation: Significant and unavoidable impact. The application of the development standards and design guidelines of the WLC Specific Plan, will help to soften the view of future buildings viewed from SR-60, but the project's incremental impact to local views in combination with the incremental impacts of other projects in the cumulative scenario would remain significant. Mitigation Measures 4.1.6.1A through 4.1.6.1D are recommended to reduce project impacts related to scenic resources. However, after implementation of the proposed mitigation measures, the alterations of views from SR-60 and Gilman Springs Road as a result of the project in combination with other cumulative projects would remain a significant and unavoidable impact. The project's contribution to cumulative impacts to scenic resources would be considered cumulatively considerable and significant and unavoidable.

6.1.3.3 Existing Visual Character and Surroundings

Impact: *The project's contribution to cumulative impacts to the existing visual character and surroundings would be cumulatively considerable.*

Threshold:	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Cumulative Impact Analysis

The project in conjunction with the cumulative development could have a substantial effect on scenic resources for motorist traveling on SR-60 and Gilman Springs Road. According to Section 4.1.6.2 of the FEIR, the Caltrans Scenic Highway Program does not identify any scenic highways near the project site. However, the City of Moreno Valley identifies SR-60, Gilman Springs Road, and Moreno Beach Drive as local scenic roads. According to the City's General Plan EIR, major scenic resources within the City are visible from SR-60, Gilman Springs Road, and Moreno Beach Drive. Existing views for motorists traveling eastbound and westbound on SR-60 consist of agricultural fields in the foreground and midground, and the Badlands and Mount Russell in the background. Existing views for motorists on Gilman Springs Road consist of agricultural fields in the foreground, the San Jacinto Wildlife Area and the Badlands in the background. Views for motorists traveling northbound and southbound on Moreno Beach Drive includes agricultural fields and residential uses in the foreground and midground, and the Badlands and Mount Russell and the foothills surrounding the Lake Perris State Recreation Area in the background. The related projects located along SR-60 would alter views of the agricultural fields in the foreground and mid-ground as well as the background views of the Badlands and Mount Russell. This alteration of views along SR-60 from the implementation of the cumulative projects such as MV-3 and MV-4 could be cumulatively significant, but the environmental document for MV-4 did not identify an individual or cumulative significant visual impact. In addition, alteration of views along Moreno Beach Drive from the implementation of cumulative related projects such as MV-1 and MV-95 could be cumulatively significant. No environmental document was available to review for MV-1 and the environmental document for MV-95 found it to be individually and cumulatively less than significant at the time of its publication. Based on a brief review of both projects, these two related projects together and in combination with the project could result in a significant visual impacts along Moreno Beach

Drive. Although the environmental document for cumulative related project RC-1 is not available, based on a brief review of the project location and project characteristics, RC-1 has the potential to substantially alter views for motorists along Gilman Springs Road, and therefore, could result in significant cumulative impacts. In summary, the cumulative projects could result in significant visual impacts for motorists along SR-60, Moreno Beach Drive and Gilman Springs Road.

According to Section 4.1.6.2 of the FEIR, development of the project would significantly alter existing views by introducing new logistics buildings and associated parking areas, roadways, infrastructure, and landscaping adjacent to SR-60 and Gilman Springs Road, but not along Moreno Beach Drive. The project meets the Caltrans' criteria in both the moderate and major visual intrusion categories. The characteristics of a "moderate intrusion" includes increased number of buildings, but complementary to the landscape; smaller setbacks and lack of roadway screening; buildings that do not degrade or obstruct a scenic view. The characteristics of a "major visual intrusion" includes dense and continuous development; highly reflective surfaces; buildings poorly maintained; visible blight; development along ridgelines; or buildings that degrade or obstruct a scenic view. Since the project meets both criteria, the project may create a significant visual impact for motorists traveling along SR-60 and Gilman Springs Road. The project would not be visible from Moreno Beach Drive, and therefore, could not cause or contribute to any cumulative impact to motorist's views from there.

Because the project could result in significant visual impacts for motorists along SR-60, and cumulative projects such as MV-3 and MV-4 could also result in significant visual impacts for motorists along SR-60, the project's contribution to cumulative impact along SR-60 would be cumulatively considerable. In addition, because the project would result in significant visual impacts for motorists along Gilman Springs Road, the project's contribution to cumulative visual impacts along Gilman Springs Road would be cumulatively considerable. Although cumulative related projects MV-3 and MV-95 could result in significant visual impacts to motorists along Moreno Beach Drive, the project would not contribute to any visual impact to motorists' views. Therefore, the project would result in no cumulative impact to visual resources that can be viewed from Moreno Beach Drive.

6.1.3.4 Light and Glare

Impact: *The project's contribution to cumulative impacts to light and glare would be cumulative considerable.*

Threshold:	Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Cumulative Impact Analysis

The project in conjunction with the cumulative development could significantly degrade the existing visual character (including light and glare) of the project site by development of the project, including both daytime glare and nighttime lighting. Development of cumulative projects within the eastern Moreno Valley area would result in the conversion of open space/vacant land to urbanized land uses. The environmental document for MV-3 identified existing visual character/light and glare, and surroundings as being a significant and unavoidable impact. MV-4 did not identify existing visual character and surroundings as having a significant impact. Both MV-3 and MV-4 are considered large warehouse projects with structures and uses that would be similar in character to the structures and uses of the project. Many of the remaining cumulative projects within the cumulative geographic area for aesthetics include residential or commercial type projects, and the associated environmental documents found the impacts to visual character/light and glare of the area to be less than significant. Because MV-4 identified significant and unavoidable impacts to the existing visual character, cumulative development within the cumulative geographic areas for aesthetics would result in a significant cumulative impact associated with visual character.

The project site is largely vacant marginal agricultural land with six occupied single family homes and associated ranch/farm buildings in various locations on the property. SDG&E operates a natural gas compressor plant on 19 acres south of the project site. The SCGC operates a metering and pipe cleaning station on two separate parcels totaling 1.5 acres also south of the project site. The project site and areas adjacent to the project site contain a variety of overhead and underground utility lines associated with oil, natural gas, and electrical service. Developed properties in the project vicinity include a logistics building to the northwest (Skechers) and several residential neighborhoods along Redlands Boulevard and Cactus Avenue along the western boundary of the project site. Development of the project would include approximately 40.6 million square feet of logistics uses with associated parking areas, ornamental landscaping, roadway and infrastructure on approximately 2,610 acres. Building heights will range from 60 to 80 feet depending on the location within the project site which will substantially impact the views of nearby residents and motorists on adjacent roadways including, but not limited to, SR-60 and Gilman Springs Road. Building roofs are expected to include solar panels which could create glare impacts.

According to Section 4.1.6.4 of the FEIR, development of the project would substantially alter the existing character and create light and glare impacts from conversions of the project site from open space to an urbanized setting with many large logistics buildings. Because the project would result in a significant impact on the visual character and light and glare from development of the area and cumulative development will also result in a significant impact on visual character, the project's contribution to cumulative impacts to the existing visual character and surroundings would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.1.6.1A, 4.1.6.1B, 4.1.6.4A, and 4.1.6.4B would be required.

Significance Level After Mitigation: Less than significant impact. The project shall comply with the City's General Plan, the City's Municipal Code (Section 9.08.100, Lighting) and the WLC Specific Plan's development guidelines for lighting and building materials. Mitigation Measure 4.1.6.1A and 4.1.6.1B would help reduce related visual impacts. Mitigation Measures 4.1.6.4A and 4.1.6.4B will help reduce light and glare associated with the new buildings near the San Jacinto Wildlife Area to the south. Mitigation Measure 4.1.6.4A requires a photometric plot of all proposed exterior lighting demonstrating that the project is consistent with the requirements of Section 9.08.100 of the Municipal Code. The lighting study shall indicate the expected increase in light levels at the property lines of the adjacent residential uses. Mitigation Measure 4.1.6.4B requires an analysis of proposed solar panels demonstrating the glare from the panels will not negatively affect adjacent residential uses or motorist along perimeter roadways. Therefore, with compliance with the City's General Plan, the City's Municipal Code, and implementation of the mitigation measures, the project's contribution to cumulative light and glare impacts would be less than cumulatively considerable.

6.2 Agricultural and Forestry Resources

Cumulative effects to agricultural and forestry resources are described in this section. A summary of the WLC project's incremental contribution to potential cumulative impacts to agricultural and forestry resources is provided in Section 6.2.1. The geographic and temporal scopes of the cumulative analysis are provided in Section 6.2.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the agricultural and forestry resources issues are discussed in Section 6.2.3.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.2-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact. In addition, this section includes an evaluation of the project's contribution to the cumulative impact to agricultural and forestry resources and whether that contribution would be cumulatively considerable.

6.2.1 Project Impact Findings

The project's effects to agricultural and forestry resources are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.2 of the Revised Sections of the FEIR is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Would the project:

- Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? **No Impact, Section 4.2.5.1.**
- Would the project result in the loss of forest land or conversion of forest land to non-forest use? **No Impact, Section 4.2.5.2.**
- Would the project conflict with existing zoning for agricultural use or a Williamson Act contract? **No Impact, Section 4.2.5.3.**
- Would the project result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural land use? **No Impact, Section 4.2.6.1.**

- Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use? **Less than Significant, Section 4.2.6.2.**

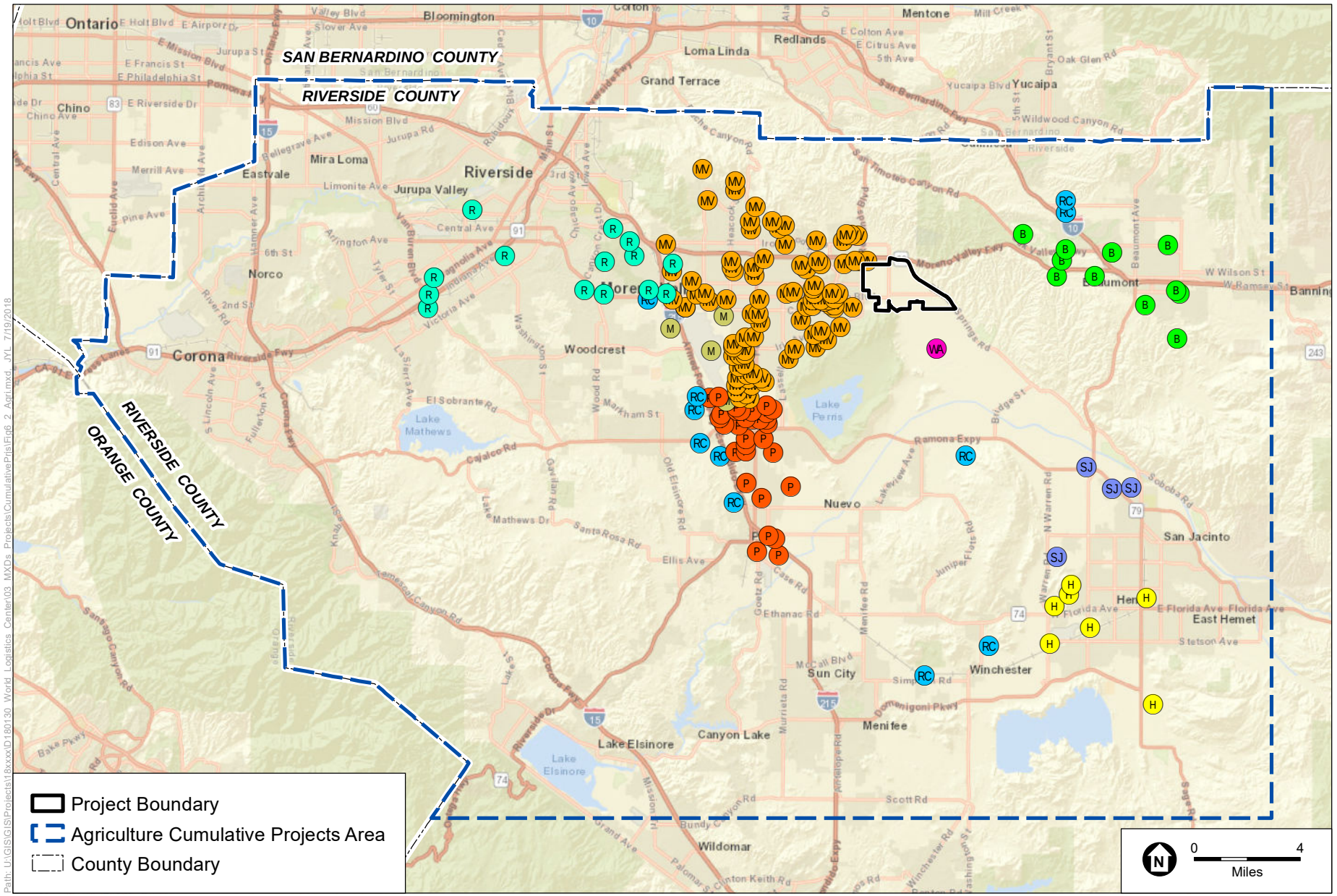
As documented in the FEIR, impacts to 25 acres of Unique Farmland were determined to be significant but were able to be reduced to less than significant with mitigation (Mitigation Measure 4.2.6.1A), which required the recordation of an Agricultural Conservation Easement over equivalent or better agricultural land. Since publication of the FEIR, the California Department of Conservation's "Riverside County Important Farmland 2016" map (published July 2017), re-designated the 25-acre Unique Farmland parcel to "Farmland of Local Importance". With the change in designation for this parcel, there is no longer any "Prime Farmland," "Unique Farmland" or "Farmland of Statewide Importance" anywhere within the project site.

Pursuant to CEQA Guidelines §15130, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR." Because the project would result in no impact related to a conflict with zoning for forest land, timberland, or timberland zoned Timberland Production; no impact related to a loss of forest land or conversion of forest land to a non-forest use; no impact related to a conflict with existing zoning for agricultural use or a Williamson Act contract; and no impact related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural land use or of forest land to non-forest use, the project would not cause or contribute to any potential cumulative in any of these respects.

Because development of the project could result in a less-than-significant impact related to the conversion of 25 acres of Farmland of Local Importance, this cumulative effects analysis evaluates whether associated cumulative effects could be significant, and if so, whether the project's contribution would be cumulatively considerable.

6.2.2 Geographic and Temporal Scope

The cumulative impact geographic area for potential impacts to agricultural use of Farmland of Local Importance is Western Riverside County. Portions of the project site have been designated as Farmland of Local Importance by the County of Riverside. Because Riverside County has two geographic regions (western and eastern), it is reasonable to focus the cumulative impact analysis within the region where the project is located. Therefore, the cumulative impact geographic area for agricultural resources is Western Riverside County. The geographic area for cumulative agricultural impacts is shown on Figure 6.2-1. The projects located within the cumulative agricultural impact area are listed in Table 6.2. The project would contribute to cumulative impacts to agricultural use starting from when the project site's 2,361 acres of Farmland of Local Importance are converted to a non-agricultural use and would last for the duration of the project.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.2-1

Agriculture Cumulative Projects Area

ESA

Table 6.2-1: Agricultural and Forestry Resources Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-3	Heartland	The Project's development of low and medium density housing on 417.2 acres would result in the loss of 160 acres of soils which are Class II when irrigated and would contribute to cumulative changes in the environment which could result in impacts to agricultural resources.
B-4	Hidden Canyon	The Project would result in the development of 426 residential units, commercial space and open space on 196.5 acres
B-5	ProLogis/Rolling Hills Ranch Industrial	The Project would change the 152,9-acre property's General Plan land use designation from low density residential to Business Park and would result in the eventual conversion of fallow farmland to light industrial use. This conversion of farmland would contribute cumulatively to the conversion of farmland in the geographic area.
B-7	Kirkwood Ranch (#14)	The significant and unavoidable impacts to undeveloped farmland associated with the development of 470 single family detached units and 60 multi-family units on a 128-acre site would contribute cumulatively to the conversion of farmland in the geographic area.
B-9	Sundance (#17)	The Project would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres of land use for dryland farming and grazing. The project would contribute to the cumulative conversion of farmland in the geographic area. .
B-11	San Gorgonio Village, Phase 2 (#45)	The project would result in the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres and would contribute to cumulative impacts to agricultural resources in the geographic area.
B-14	Potrero Creek Estates (#26)	This Project would result in the development of 1,028 single family lots on 737 acres.
H-3	Tres Cerritos Specific Plan	The Project would result in the development of 787 residential units, park and open space, on 154.7 acres
H-4	Sanderson Square	The Project would result in the development off commercial and industrial uses on approximately 45 acres designated as farmland and used historically as farmland and would contribute to the cumulative conversion of farmland in the geographic area.
H-5	McSweeny Farms Specific Plan	This Project would result in the development off commercial and industrial uses on approximately 45 acres.

Project ID	Project Name	Environmental Document Summary
H-6	Ramona Creek Specific Plan	This Project would result in the development of a multiple-use commercial and residential community
H-7	Peppertree Specific Plan	The Project would result in the development of 456 residences, and recreational spaces on 79.2 acres leading to the conversion of 79.2 acres of prime farmland to non – agricultural use. The Project would contribute to the cumulative conversion of farmland in the geographic area.
H-9	Pulte Del Web (TTM 31807 and 31808)	The Project would result in the conversion of 164.77 acres of mostly prime soils and agricultural land to a non-agricultural use and would contribute to the cumulative conversion of farmland within the geographic area.
M-2	Meridian Business Park Phases I and II	The project would result in the development of a 130 acre business park on farmland of local importance and would contribute to the cumulative conversion of farmland in the geographic area.
M-8	March LifeCare Campus Specific Plan	The project would result in the development of a medical campus on approximately 236 acres and could contribute to the cumulative conversion of farmland within the geographic area.
MV-3	ProLogis	The Project's development of 2,244,638 square feet of distribution warehouse space would result in a significant and unavoidable impact to farmland conversion and would contribute to the cumulative removal or conversion of farmland in the geographic area.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility con land previously used for dryland farming would contribute to the cumulative conversion of farmland and impacts to agricultural resources in the geographic area.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the Agricultural and forestry resources in the geographic area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the agricultural and forestry resources in the geographic area.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the agricultural and forestry resources in the geographic area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the agricultural and forestry resources in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the agricultural and forestry resources in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is less than significant impact to no impact on the agricultural and forestry resources in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the agricultural and forestry resources in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the agricultural and forestry resources in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the agricultural and forestry resources in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact on the agricultural and forestry resources in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact on the agricultural and forestry resources in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant to impact on the agricultural and forestry resources in the area.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the agricultural and forestry resources in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the agricultural and forestry resources in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the agricultural and forestry resources in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no information on the ND regarding the impact on agricultural and forestry resources in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the agricultural and forestry resources in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the agricultural and forestry resources in the area.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the agricultural and forestry resources in the area.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is no impact on the agricultural and forestry resources in the area.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact on the agricultural and forestry resources in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is no impact on the agricultural and forestry resources in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact on the agricultural and forestry resources in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. It does not specifically mention an impact on the agricultural and forestry resources in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is no impact on the agricultural and forestry resources in the area.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is less than significant to no impact on the agricultural and forestry resources in the area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the agricultural and forestry resources in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is less than significant to no impact on the agricultural and forestry resources in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is less than significant to no impact on the agricultural and forestry resources in the geographic area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. The project would result in a significant and unavoidable impact to farmland conversion and would contribute to the cumulative removal or conversion of farmland in the geographic area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the agricultural and forestry resources in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The project would not cause significant environmental impacts. The resolution does not specifically mention an effect on the agricultural and forestry resources in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the agricultural and forestry resources in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is no impact on the agricultural and forestry resources in the area.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the agricultural and forestry resources in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the agricultural and forestry resources in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is no impact on the agricultural and forestry resources in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the agricultural and forestry resources in the area.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the agricultural and forestry resources in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the agricultural and forestry resources in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres There is impact on the agricultural and forestry resources in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is no impact on the agricultural and forestry resources in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact on the agricultural and forestry resources in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the agricultural and forestry resources in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the agricultural and forestry resources in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the agricultural and forestry resources in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12-unit condominium complex on approximately 0.9 acres. The resolution states that the project will not have a significant impact on the environment. It does not specifically mention an impact on the agricultural and forestry resources in the area.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. The exemption does not specifically mention impacts on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the agricultural and forestry resources in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the agricultural and forestry resources in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is no impact on the agricultural and forestry resources in the area.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is no impact on the agricultural and forestry resources in the area.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is less than significant to no impact on the agricultural and forestry resources in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the agricultural and forestry resources in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the agricultural and forestry resources in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is less than significant to no impact on the agricultural and forestry resources in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is no impact on the agricultural resources in the area.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. There is no significant impact on the environment. The resolution did not specifically state an impact on the agricultural and forestry resources in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the agricultural and forestry resources in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution stated that there would be no significant impact to the environment. The resolution did not specifically mention an impact on the agricultural and forestry resources in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution did not mention whether or not there would be an environmental impact on the area.

Project ID	Project Name	Environmental Document Summary
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is no impact on the agricultural and forestry resources in the area.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the agricultural and forestry resources in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the agricultural and forestry resources in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the agricultural and forestry resources in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the agricultural and forestry resources in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the agricultural and forestry resources in the area.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. There is no impact on the agricultural and forestry resources in the area.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. There is no impact on the agricultural and forestry resources in the area.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. There is no impact on the agricultural and forestry resources in the area.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. There is a less than significant to no impact on the agricultural and forestry resources in the area.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. There is no impact on the agricultural and forestry resources in the area.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. There is no impact on the agricultural and forestry resources in the area.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. There is no impact on the agricultural and forestry resources in the area.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. There is no impact on the agricultural and forestry resources in the area.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. There is no impact on the agricultural and forestry resources in the area.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. After the approval of the EIR for the 2005 General plan which included the conversion of agricultural lands to other uses, it was decided that there is no impact on the agricultural and forestry resources in the area.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. There is no impact on the agricultural and forestry resources in the area.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. There is no impact on the agricultural and forestry resources in the area.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. There is a less than significant to no impact on the agricultural and forestry resources in the area.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. There is no impact on the agricultural and forestry resources in the area.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. There is no impact on the agricultural and forestry resources in the area.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. There is no impact on the agricultural and forestry resources in the area.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. There is a less than significant to no impact on the agricultural and forestry resources in the area.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. There is a significant impact on the agricultural and forestry resources in the area. This is mitigated by the converting prime farmland, which is done by moving the top 12 inches of soils from parcels 302-030-003 and 302-030-00 to a farm site with lower quality soil.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. There is no impact on the agricultural and forestry resources in the area.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. There is no impact on the agricultural and forestry resources in the area.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. There is no impact on the agricultural and forestry resources in the area.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. There is no impact on the agricultural and forestry resources in the area.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. There is no impact on the agricultural and forestry resources in the area.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. There is no impact on the agricultural and forestry resources in the area.
P-38	Sequoia	Summary to be provided.

Project ID	Project Name	Environmental Document Summary
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. There is a less than significant impact on the agricultural and forestry resources in the area.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. There is no impact on the agricultural and forestry resources in the area.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. There is no impact on the agricultural and forestry resources in the area.
R-3	P07-1028, -0102; and P09-0416, -0418, -0419	Per the City of Riverside's December 2009 Final EIR, the project would develop a 36.91 acre business park development for light industrial, warehouse distribution, and office uses on 80.07 acres. There is no impact on the agricultural and forestry resources in the area.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. There is no impact on the agricultural and forestry resources in the area.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. There is no impact on the agricultural and forestry resources in the area.
RC-5	Villages of Lakeview -Residential/Commercial Development	The Project would result in the conversion of between 551-1,265 acres of prime farmland and farmland of statewide importance and would contribute to the cumulative conversion of farmland in the geographic area.

Project ID	Project Name	Environmental Document Summary
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. There is no mention of agricultural and forestry resources in the area. However, it seems that there may be no impact because agricultural and forestry resources are not mentioned on the slide that discusses significant impacts not mitigated.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62-acre detention basin on 47.25 acres. There is no impact on the agricultural and forestry resources in the area.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. There is no impact on the agricultural and forestry resources in the area.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. There will be no impact on the agricultural and forestry resources in the area.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. There is no impact on the agricultural and forestry resources in the area.

Project ID	Project Name	Environmental Document Summary
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. There is no impact on the agricultural and forestry resources in the area.
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. There is no impact on the agricultural and forestry resources in the area.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. There is a less than significant to no impact on the agricultural and forestry resources in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is no impact on the agricultural and forestry resources in the area.

6.2.3 Cumulative Impact Evaluation

6.2.3.1 Conversion of Farmland to Non-Agricultural Uses

Impact: *The project's contribution to the cumulative conversion of Farmland of Local Importance to non-agricultural use is cumulatively considerable.*

Threshold:	Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use?

Cumulative Impact Analysis

The implementation of the cumulative related projects listed in Table 6.2-1 includes farmlands that are proposed to be converted to a non-agricultural use including cumulative related project RC-5 (Villages of Lakeview). Specifically related to cumulative related project RC-5, the mitigation measure proposed to reduce this potential impact includes the conservation of approximately five percent of the agricultural land classified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance and Farmland of Local Importance; however, potential impacts would remain significant and unavoidable. The environmental document for MV-3 identified Farmland Conversion as being a significant and unavoidable impact. MV-4 did not identify Farmland Conversion as having a significant impact. Both MV-3 and MV-4 are considered large warehouse projects with structures and uses that would be similar in character to the structures and uses of the project. Many of the remaining cumulative projects within the cumulative geographic area for agriculture include residential or commercial type projects, and the associated environmental documents found the impacts to be less than significant. Because there are cumulative related projects such as RC-5, MV-3 and MV-4 that would result in significant farmland conversion impacts, the cumulative related projects would result in significant cumulative impacts due to the conversion of an agricultural use to a non-agricultural use.

As discussed in Section 4.2, the WLC project site is currently in agricultural use. Approximately 2,200 acres are currently farmed of the 2,361 acres on the project site that are designated as Farmland of Local Importance. The implementation of the project would result in a maximum conversion of 2,361 acres to non-agricultural uses, and this conversion, while less than significant by itself, represents a significant contribution to a cumulative impact. As a result, the project's contribution to the cumulative conversion of Farmlands and land designated as Farmlands of Local Importance would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures:

The following mitigation measure has been developed to reduce the project's contribution to the cumulative impacts to agricultural uses and loss of Farmlands of Local Importance.

6.2.1: Prior to the issuance of any grading permit affecting land designated as "Farmland of Local importance" (Figure 4.2.2 in the World Logistics Center Environmental Impact Report), an Agricultural Conservation Easement shall be recorded over land of equivalent or better agricultural economic productivity of the offsite easement property compared to the World Logistics Center property. The analysis will include a comparison of the project's "Farmland of Local Significance" considering its relative economic potential as the best measure of productivity (i.e., net profitability per acre or potential net rental income per acre). It will include a consideration of various important physical factors including location and accessibility, soils and topography, micro and macro climatic conditions, water availability and quality, as well as local practices, good farm management and cultural (growing) costs. The form and content of this easement, as well as the estimates of agricultural productivity, shall be reviewed and approved in advance by the Planning Official.

Significance Level After Mitigation: Less than significant

The implementation of Mitigation Measure 6.2.1 would conserve agricultural land that is as productive as the onsite designated Farmland of Local Importance. This measure would conserve land located offsite that has equivalent or better agricultural economic productivity compared to the agricultural economic productivity of the project site. The implementation of this measure would reduce the project's contribution to the cumulative impact on Farmlands and land designated as Farmland of Local Importance to less than cumulatively considerable.

6.3 Air Quality

Cumulative effects to air quality are described in this section. A summary of the project's potential impacts to air quality issues is provided in Section 6.3.1. The cumulative impact geographic areas for air quality issues are provided in Section 6.3.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the air quality issues are discussed in Section 6.3.3. In addition, a brief summary of the significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.3.3 as well as applicable mitigation measures and significance determination after mitigation.

The cumulative projects identified in Table 6.3-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they would contribute to a cumulatively considerable impact to air quality. These potentially cumulative impacts are documented in the following section.

6.3.1 Project Impact Findings

The project's effects to air quality are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.3 of the Revised Final Programmatic EIR Sections (RPFEIRS) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Would the project:

- Conflict with or obstruct implementation of the applicable air quality plan? **Significant and Unavoidable with Mitigation, Section 4.3.6.1.**
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation? **Less than Significant, Section 4.3.5.2.**
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); **Significant and Unavoidable with Mitigation, Section 4.3.6.**
- Expose sensitive receptors to substantial pollutant concentrations? **Significant and Unavoidable with Mitigation, Section 4.3.6.2; Significant and Unavoidable with Mitigation, Section 4.3.6.3; and Significant and Unavoidable with Mitigation, Section 4.3.6.4; Significant and Unavoidable with Mitigation, Section 4.3.6.5;**
- Create objectionable odors affecting a substantial number of people? **Less than Significant, Section 4.3.5.1.**

6.3.2 Geographic and Temporal Scope

The geographic scope of analysis for cumulative air quality impacts is the Air Basin and the identified cumulative projects. The SCAQMD recommends using two different methodologies to analyze cumulative air quality impacts: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;[1] and (2) that a project's consistency with the current

[1] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

AQMP be used to determine its potential cumulative impacts. Utilizing these two methodologies can determine a project's contribution to cumulative impacts. Should a project result in significant and unavoidable impacts, the project would most likely generate a cumulatively considerable impact, as the project alone is already exceeding respective SCAQMD significance thresholds. If a project's emissions were approaching significance thresholds with mitigation measures, these projects could also have a potential to cause a significant impact when combined with other projects within the project analysis area. Also, if a project was not consistent with AQMP, this could cause a cumulative impact as the AQMP is established to achieve air quality standards within the Basin.

Because the significance thresholds adopted by the SCAQMD are designed to assist the Basin in attaining the applicable NAAQS and CAAQS, the SCAQMD recommends application of the same significance thresholds for Project-level impacts and cumulative impacts. Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[2] Because the Project Site is located in a region that is in non-attainment for ozone, PM10, and PM2.5 under federal and/or state standards, should project specific emissions with mitigation exceed the SCAQMD daily significance thresholds, the Project's construction-related and operational emissions would be cumulatively considerable or contribute to cumulatively significant air quality impacts.

Although the Basin is considered the geographic area relative to cumulative impacts, it would be impracticable and unreasonable to review project-specific data and analyses related to regional emissions, localized impacts, health risks, and odors from all projects contemplated, entitled, and being built within the 6,745 square mile Basin. Instead this cumulative analysis was based on the limits set forth in the cumulative traffic analysis conducted by the project. This area includes the entire City of Moreno Valley and portions of the Cities of Riverside, Redlands, Beaumont, Perris, San Jacinto, Hemet and Calimesa, as well as portions of unincorporated Riverside and San Bernardino County, and the March JPA. The geographic area for these basin-wide projects is shown on Figure 6.3-1. For localized impacts, such as LSTs and odors, a geographic map for these cumulative projects are shown on Figure 6.3-2. Approximately 360 projects have been identified in the vicinity of the Project and are listed in Table 6.3-1. Out of those 360 projects, approximately 162 environmental documents were available. All 162 were reviewed to identify quantitative emissions for construction and operation of the respective projects. However, only 35 of the available documents contained construction and operation emissions. A mixture of results was identified for these 35 projects, 28 projects were found to have a less than significant impact, four projects were found to have a significant and unavoidable impact for operations and four projects were found to have a significant and unavoidable impacts for both construction and operations. Despite not having all the emissions from every one of the 360 cumulative projects within SCAB, a determination on the project's cumulative impact could still be assessed based on the SCAQMD's strategies in assessing a cumulatively considerable impact, where projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[3] As shown in Section 4.3.6 Significant Impacts (Air Quality), project-specific impacts were found to result in significant and unavoidable impacts with mitigation.

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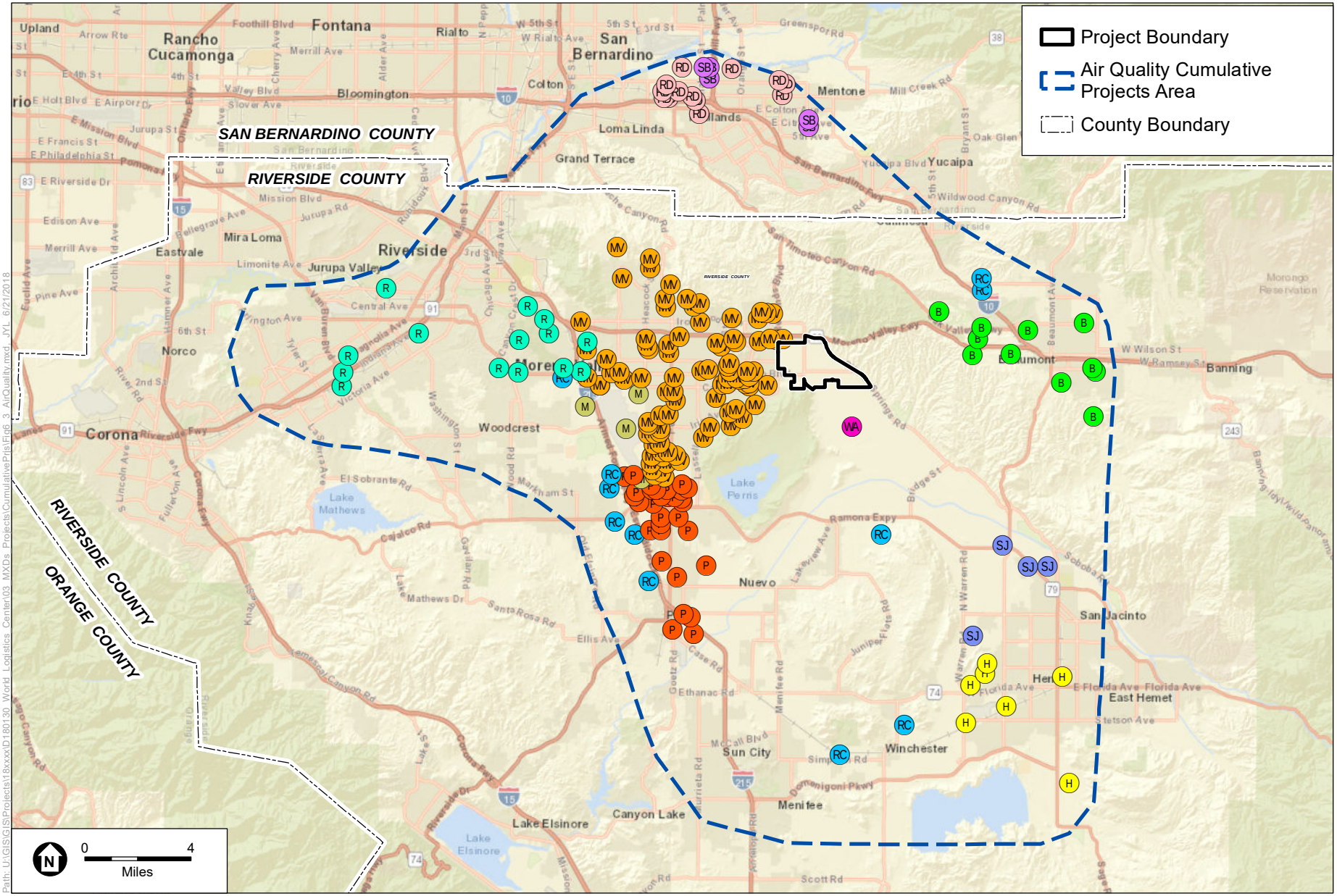
2 South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

3 South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.3-1

Air Quality Cumulative Projects Area

ESA

Table 6.3-1 - Air Quality Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. The construction phase and project operation air quality impacts would exceed thresholds and remain significant after mitigation.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. The project would result in the generation of pollutants both short and long-term and the level of impacts is considered significant, even with mitigation.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park. After mitigation, no significant impact would occur to air quality.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. The cumulative impacts of this project in conjunction with all other past, current, and future projects will have adverse impacts on regional air quality.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. No significant air quality impacts as compared to the Deutsch Specific Plan.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. The project will have no impact on air quality.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. The project would have a less than significant impact on air quality.
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. The project would have a less than significant impact on air quality.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The project would result in no impact to air quality.

Project ID	Project Name	Environmental Document Summary
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's 2008 EIR , the Tres Cerritos Specific Plan would result in the development of 787 residential units, park and open space, on 154.7 acres. The project would result in no impact to air quality.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. The project would have a less than significant impact on air quality.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. The project would have a less than significant impact on air quality.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The project would have a less than significant impact on air quality and is consistent with SCAG's Regional Comprehensive Plan and Guide.
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. The project would have a less than significant impact with mitigation incorporated on air quality.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR , the project would result in the development of a 130 acre business park. The project would have significant and unavoidable impacts on air quality.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. The project woul have significant and unavoidable impacts on air qualtiy.
M-9	TM 34748	A Negative Declaration was prepared for the project, therefore, the project would have no significant effect on the environment.

Project ID	Project Name	Environmental Document Summary
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. The project would have a less than significant impact on air quality.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. Project would have significant air quality impacts.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. The project is consistent with the Air Quality Management Plan and impacts to air quality would be less than significant.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. The project would produce excessive volatile organic compound emissions, but would have a less than significant impact on air quality with mitigation.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. The project would have a less than significant impact on air quality.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. The project would have a less than significant impact on air quality with mitigation measures incorporated.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. Per the negative declaration, the project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. The project would have a less than significant impact on air quality.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. Per the negative declaration, the project would have a less than significant impact on air quality.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project would have significant and unavoidable impacts to air quality.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project would have a less than significant impact on air quality.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. Emissions during project construction would violate air quality standards for VOCs and NO_x and would have a significant direct and cumulative impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. The project would exceed the South Coast Air Quality Management District recommended regional significance thresholds for NO_x and would have a significant impact on air quality.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. The project would exceed the South Coast Air Quality Management District recommended regional significance thresholds for NO_x and would have a significant direct and cumulative impact on air quality.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. The project would have a less than significant impact on air quality.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. The project would have a significant impact on air quality, even with mitigation.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. The project would have a less than significant impact on air quality with mitigation.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. The project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. The project would have a less than significant impact on air quality with mitigation.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. The project would have a less than significant impact on air quality with mitigation incorporated.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. The project would have significant direct and cumulative impacts on air quality due to the exposure of sensitive receptors to substantial pollutant concentrations.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. The project would generate NO_x in exceedance of South Coast Air Quality Management District regional thresholds and be inconsistent with the current Air Quality Management Plan. The project would have a significant impact on air quality.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. The project would result in significant individual and cumulative impacts to air quality from emissions of CO, PM_{10}, NO_x, and reactive organic gases.

Project ID	Project Name	Environmental Document Summary
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. The project is not consistent with the Regional Growth Management Strategy or Air Quality Management Plan and would have a significant impact on air quality.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. The project would have a less than significant impact on air quality with mitigation incorporated.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. The project would have a less than significant impact on air quality.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. The project would have a less than significant impact on air quality.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. The project would have a less than significant impact on air quality with mitigation incorporated.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. The project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. The project would have a less than significant impact on air quality with mitigation incorporated.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. The project would have a less than significant impact on air quality with mitigation incorporated.

Project ID	Project Name	Environmental Document Summary
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. Per the Negative Declaration, the project would have a less than significant impact on air quality.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. Per the Negative Declaration, the project would have a less than significant impact on air quality.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. The project would have a direct a cumulative impact on air quality.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. The project would have a less than significant effect on air quality with mitigation incorporated.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. The project would not have a significant impact on air quality.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. The Project would contribute to an increase of emissions due to operational NOx, and would have a significant impact on air quality.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. The project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. The project would have a significant impact on air quality.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. The project would have a significant impact on air quality and would exceed the SCAQMD daily regional emissions thresholds for VOC and NO_x.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. The project would not have any related long-term air quality impacts.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. The project would have a significant impact on air quality.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. Project would have an impact on air quality and regional NO_x emissions would exceed SCAQMD operational threshold after implementation of mitigation measures.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The project documentation provided no information on significance of air quality impacts.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. The project would have a significant impact on air quality.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. The project would have a significant impact on air quality.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. The project has mitigation measures in place for air quality impacts, no information on if impacts are significant after mitigation implemented.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. The project would have a less than significant impact on air quality with mitigation incorporated.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. The project would have a less than significant impact on air quality with mitigation incorporated.

Project ID	Project Name	Environmental Document Summary
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. The project will have a less than significant impact on air quality.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. The project would have a cumulative impact on air quality.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. The project would have significant air quality impacts on air pollutant emissions.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. The project would have a potentially significant impact on air quality.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. The project has mitigation measures for air quality impacts, no information given on significance of impacts after mitigation.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. The project would have significant impacts on air quality.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. The project would have a less than significant impact on air quality.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. The project would have a less than significant impact on air quality with mitigation incorporated.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. Per the City of Perris' 2009 Initial Study, the project would have a potentially significant impact on air quality.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. The project would have a less than significant impact on air quality.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. The project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. The project would not have a significant impact on air quality.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. The project would have cumulatively significant impacts to air quality.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. The project would have significant air quality impacts, even with mitigation incorporated.
R-3	P07-1028, -0102; and P09-0416, -0418, -0419	Per the City of Riverside's December 2009 Final EIR, the project would develop a 36.91 acre business park development for light industrial, warehouse distribution, and office uses on 80.07 acres. The project would have significant air quality impacts, even with mitigation incorporated.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. The project would have a less than significant impact on air quality.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. The project would have significant impacts on air quality.
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area. The project would have potentially significant impacts on air quality.

Project ID	Project Name	Environmental Document Summary
RC-5	Villages of Lakeview - Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. The project would have significant impacts to air quality.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The project would have significant air quality impacts of Short-term and long-term cumulative impacts of VOC, NO_x, CO, PM_{10} and $PM_{2.5}$.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. The project would have no impact on air quality.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. The project would have significant impacts on air qualtiy.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. The project would have a less than significant impact on air quality.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. The project would have a significant impact on air quality.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. The project would have a significant impact on air quality.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. The project would have a less than significant impact on air quality with mitigation incorporated.

Project ID	Project Name	Environmental Document Summary
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. The project would have a less than significant impact on air quality with mitigation incorporated.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. The project would have significant impacts to air quality.
RD-1	Tract 18988	Per the City of Redlands' June 2015 MND, the project would widen Pioneer Avenue to preserve existing deodar cedar trees along an approximately 1,100 linear foot segment between Texas Street and Furlow Drive. The project also would develop 82 single-family residential lots on 30.51 acres. The project would have less than significant impacts to air quality.
RD-3	Newland Homes Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the construction of 105 single family detached dwelling units and a neighborhood park on 39.84 acres. The project would have a less than significant impact on air quality.
RD-4	Redlands Pennsylvania Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the subdivision of a 24.87 acre project site into 67 residential lots and 10 lots as open space. Additionally, the Project seeks approval to remove 5 acres from an Agricultural Preserve. The project would have less than significant impacts on air quality. The project would have a less than significant impact on air quality with mitigation incorporated.
RD-6	Woodsprings Hotel	Per the City of Redlands' March 2018 IS, the Project would result in the construction of a 124-room hotel on a 2.68-acre property.
RD-10	Park Ave Industrial Center	Per the City of Redlands' March 2014 MND, the project would develop approximately 170,000 square feet of light industrial uses, including 289 parking spaces and 12, 500 square feet of office space. The project would have a less than significant impact on air quality with mitigation incorporated.
RD-11	Marriott Springhill Suites	Per the August 2016 technical memorandum regarding the Trip Generation, Distribution, and Assignment Analysis for the project, the project would develop a four-story 88-room hotel with rooms, suites, and 97 parking spaces. The project would have a less than significant impact on air quality.
RD-12	I-10 Redlands LC - B	Per the August 2014 letter responding to comments on the proposed MND, the project would develop approximately 1.1 million square feet for warehousing/ fulfillment/distribution center uses on 50.67 acres. Project would have a less than significant impact on air quality with mitigation incorporated.

Project ID	Project Name	Environmental Document Summary
RD-14	Redlands DC 772,000 SF (2015)	Per the City of Redlands' September 2013 MND, the project would develop 771,839 square feet of warehouse distribution center on 35.59 acres and related parking. The project would have a less than significant impact on air quality with mitigation incorporated.
RD-16	APL Logistics	Per the May 2012 City of Redlands Commission Review and Approval No. 873, the project would develop 809,338 square feet of warehouse uses on 37.4 acres. The project would have a less than significant impact on air quality with mitigation incorporated.
SB-1	Redlands Gateway Logistics - B	Per the County of San Bernardino's 2009 IS, the project would result in the construction of 5 two-story structures and 7 single-story structures with a maximum floor area of 216,500 square feet, and a three-story hotel with 180 rooms and a floor area of 80,000 square feet. The project would have a less than significant impact on air quality with mitigation incorporated.
SB-2	Redlands Gateway Logistics - A	Per the County of San Bernardino's 2014 IS, the project proposes to subdivide 42.66 acres into 2 lots. Parcel 1 is 14.81 acres and Parcel 2 is 27.85. The project would have a less than significant impact on air quality with mitigation incorporated.
SB-3	Prologis #12	Per the County of San Bernardino's 2013 IS, the project would result in a conditional use permit to establish a 593,916 square-foot industrial building to be use as a "high cube" warehouse distribution facility, a tentative parcel map for a one lot subdivision, and a general plan amendment to change the official land use district from East Valley/General commercial to East Valley/regional industrial on 27.42 acres. The project would have a less than significant impact on air quality with mitigation incorporated.
SB-4	Prologis #17	Per the County of San Bernardino's April 2014 MND, the Project would result in the construction of a 777,620 square foot industrial building and the relocation of an existing telecommunication tower on a 35.98 acre site. The project would have a less than significant impact on air quality with mitigation incorporated.
SB-6	Prologis #8	The project would have a less than significant impact on air quality.
SB-7	Sam Redlands Tract	Per the City of Redlands' March 2017 ISMND, the Project would result in the subdivision of an 11.97 acre site into 34 single family residential lots, 4 lettered lots, and the demolition of existing structures. The project would have a less than significant impact on air quality.
SB-8	Jacinto Tract	Per the City of Redlands' July 2016 ISMND, the Project would result in the subdivision of an 18.54 acre site into 40 residential lots. The project would have a less than significant impact on air quality.

Project ID	Project Name	Environmental Document Summary
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. The project would have a less than significant impact on air quality with mitigation incorporated.

6.3.3 Cumulative Impact Evaluation

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant. Because the Air Basin is currently in nonattainment of the Federal ambient air quality standards for ozone, PM_{10}, and $PM_{2.5}$, related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance.

6.3.3.1 Odors

Impact: *The project's contribution to cumulative objectionable odors would be less than cumulatively considerable.*

Threshold:	Would the project create objectionable odors affecting a substantial number of people?

Cumulative Impact Analysis

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

As stated previously in Section 4.3.5.1, diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors. Currently, there are six occupied single-family homes and associated ranch/farm buildings in various locations on the project site. The nearest off-site existing sensitive receptors in the vicinity of the project site are the residences located along Bay Avenue, Merwin Street, west of Redlands Boulevard, and scattered residences along Gilman Springs Road north of Alessandro Boulevard. Diesel exhaust would also be emitted during operation of the project from the trucks that would visit the project site. However, the concentrations would not be at a level to result in a negative odor response at nearby sensitive or worker receptors. In addition, modern emission control systems on diesel vehicles since 2007 virtually eliminate diesel's characteristic odor. Further, project mitigation requires that 2010 or newer diesel vehicles be used during construction.

During blow-down maintenance activities, natural gas odors will be present around the SDG&E Compressor Plant located south of the project site. When this portion of the WLC Specific Plan is developed, these odors will occasionally be detectable from the industrial warehouse properties adjacent to the SDG&E facility. These odors will be infrequent and odorized natural gas will not be present in high concentrations. Therefore, potential odor impacts from on-site natural gas operations are considered to be less than significant and do not require mitigation.

Adherence to applicable provisions of these rules is standard for all development within the Basin. In addition, conditions for the design of waste storage areas on the proposed site would be established through the permit process to ensure enclosures are appropriately designed and maintained to prevent the proliferation of odors. Solid waste generated by the proposed on-site uses will be collected by a contracted waste hauler, ensuring that any odors resulting from on-site uses would be adequately managed.

Of the 162 environmental documents that were evaluated, all found that the respective projects would not create objectionable odors that will affect a substantial number of people and many projects were found to have a less than significant impact or no impact at all. Furthermore, Project-specific impacts would be less than significant and would not exceed the AQMDs significance threshold for odors. [4] Therefore, impacts associated with this issue would be considered cumulatively less than significant and no mitigation is required.

Significance Level Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant.

6.3.3.2 Long-term Microscale (CO Hot Spot) Emissions

Impact: *The project's contribution to cumulative impacts associated with the violation of any air quality standard would be less than cumulatively considerable.*

Threshold:	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? For CO, the applicable thresholds are: - California State one-hour CO standard of 20.0 ppm; and - California State eight-hour CO standard of 9.0 ppm.

Cumulative Impact Analysis

As identified in Section 4.3.5.2, no significant CO hot spot impacts would occur due to project operations. The SCAQMD anticipates that CO emissions in the future will decrease with advances in technology. As previously identified, background concentrations in future years are anticipated to continue to decrease as the concerted effort to improve regional air quality progresses. Therefore, ambient CO concentrations, from cumulative projects within the Basin, in the future years would generally be lower than existing conditions.

For this project analysis, peak hour traffic volumes, at the intersections with the highest traffic volumes and LOS E or F before mitigation were identified and evaluated for each condition analyzed. In addition, the emission factors for "all" vehicle classes are not adjusted for a project-specific fleet to provide a worst-case scenario. In addition, the emission factors do not take into account the project mitigation reductions from requiring that all diesel trucks are model year 2010 or newer. The project evaluation found that no CO hot spot impacts would occur at intersections with the highest traffic volumes and ranged as LOS E or F.

[4] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

Furthermore, out of the 162 environmental documents within the Basin that were reviewed, all projects found that no hot spot impacts would occur with their respective projects. Similar to the project, intersections with the highest traffic volumes and worst LOS were identified and evaluated. No exceedance of significance thresholds was estimated. Furthermore, Project-specific impacts would be less than significant and would not exceed the AQMDs significance threshold for CO hot spot emissions. [5] Based on the analysis and SCAQMD methodology, it is reasonable to assume that a less than significant cumulative CO impact would occur.

Significance Level Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant.

6.3.3.3 Air Quality Plan Management Plan Consistency

Impact: *The project's contribution to the cumulative conflict with implementation of the applicable air quality plan would be cumulatively considerable.*

Threshold:	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Cumulative Impact Analysis

As previously stated in Section 4.3.6, according to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (SCAQMD 1993, page 12-3).

As discussed previously in Section 4.3.6.2 Construction Emissions, construction activities associated with the project would exceed the SCAQMD daily emission thresholds for all criteria pollutants (VOC, NOx, CO, PM_{10}, and $PM_{2.5}$), with the exception of SO_X.

In addition, out of the 162 environmental documents that were evaluated, 62 were found to be completed with construction or currently undergoing construction. Therefore, 62 potentially cumulative projects are located within the Basin that could undergo construction activities during the project's 15-year construction period. However, even if none of these 62 Basin-wide cumulative projects undergo construction while the project is under construction, a cumulatively considerable impact will occur because projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[6] As previously stated the Project-specific construction emissions presented in Section 4.3.6.2 exceed the applicable SCAQMD significance thresholds for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$; therefore, a cumulatively considerable impact will occur, despite any potential construction activity associated with another Basin-wide project.

The SCAB is classified as nonattainment for the Federal ambient air quality standards for ozone, PM_{10}, or $PM_{2.5}$; therefore, according to this criterion, the project would not be consistent with the AQMP. The

[5] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

[6] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

regional emissions assume a zero baseline for existing emissions on the project site and therefore assumes that the AQMP had no emissions for the project site. The regional significance thresholds can be interpreted to mean that if project emissions exceed the thresholds, then the project would also not be consistent with the assumptions in the AQMP. The project does not meet this criterion. As previously identified in Section 4.3.6.4 Long-Term Operational Emissions, the long-term operation and combined construction and operational emissions of the project would contribute to long-term regional air pollutants despite implementation of mitigation measures.

Out of the 162 Basin-wide environmental documents, five basin wide cumulative projects were identified as exceeding VOC significance thresholds and seven projects were identified as exceeding NOX emissions. Those projects that were found to exceed the SCAQMD thresholds were primarily industrial land uses or larger single-family residential developments. The number of each project type is provided in Table 6.3B. As shown, in Table 6.3B, up to 18 multi-family residential projects have been proposed in the Basin, in combination with 43 single-family residences and 36 industrial projects.

The cumulative impacts of all 360 projects have been taken into consideration with the AQMD thresholds. However, a cumulatively considerable impact will occur because projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[7] As previously stated the Project-specific operation emissions presented in Section 4.3.6.4 exceed the applicable SCAQMD significance thresholds for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$; therefore, a cumulatively considerable impact will occur, despite the potential operation of any of the identified Basin-wide cumulative projects.

Table 6.3-2: Air Quality Cumulative Operation Emissions

Type of Project	Number Identified within Moreno Valley
Business Park, Light Industrial	5
Industrial	36
Hotel	1
Medical	2
Mixed Use	4
Office	1
Residential - Assisted Living	1
Mixed Use – Residential	3
Single-Family Residential	43
Multi-Family Residential	18
Retail	11

Source: City of Moreno Valley, 2018
Mixed Use = Retail and residential combined plans
Mixed Use - Residential = Single and Multi-Family Residences

[7] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

Significance Level Before Mitigation: Project construction would result in cumulatively considerable and potentially significant cumulative air impacts. Implementation of the project would contribute to significant long-term cumulative air quality impacts.

Mitigation Measures: As indicated in Section 4.3.6.1 Air Quality Management Plan Consistency, to facilitate monitoring and compliance, applicable SCAQMD regulatory requirements will be implemented. **Mitigation Measures 4.3.6.2A, 4.3.6.2B, 4.3.6.2C, 4.3.6.2D, 4.3.6.3A, 4.3.6.3B, 4.3.6.3C, 4.3.6.3D,** and **4.3.6.4A** are required and shall be incorporated in all project plans, specifications, and contract documents.

Significance Level After Mitigation: As noted above, construction and operation of the project would exceed applicable thresholds for all criteria pollutants, with the exception of SO_X. Despite the implementation of mitigation measures, emissions associated with the project cannot be reduced below the applicable thresholds. The project In the absence of feasible mitigation to reduce the project's emission of criteria pollutants to below SCAQMD construction and operation thresholds, potential air quality impacts resulting from construction and operation will remain significant and unavoidable. Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[8] Even with mitigation the Project-specific emissions in combination with any of the Basin-wide cumulative projects that have been identified, will result in a cumulative considerable impact.

6.3.3.4 Construction Emissions

Impact: *The project's contribution to the cumulative exceedance of applicable daily thresholds that may affect sensitive receptors would be cumulatively considerable.*

Threshold:	Would the project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? For construction operations, the applicable daily thresholds are: - 75 pounds per day of ROC/VOC; - 100 pounds per day of NOX; - 550 pounds per day of CO; - 150 pounds per day of PM10; - 150 pounds per day of SOX; and - 55 pounds per day of PM2.5.

Cumulative Impact Analysis

The construction analysis discussed in Section 4.3.6.2 Construction Emissions found that construction activities associated with the project would exceed the SCAQMD daily emission thresholds for all criteria pollutants (VOC, NOx, CO, PM_{10}, and $PM_{2.5}$), with the exception of SO_X. Fugitive dust and exhaust emissions during the anticipated peak construction day for the project would also exceed SCAQMD daily construction thresholds. The percentage of dust and exhaust varies by year but for PM_{10} is an average of 88 percent dust and 12 percent exhaust. $PM_{2.5}$ has an average of 50 percent

[8] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

dust and 50 percent exhaust. Accordingly, projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[9]

In addition, out of the 162 environmental documents that were evaluated, 62 were found to be completed with construction or currently undergoing construction as of May 2018. Therefore, 62 potentially cumulative projects are located within the Basin that could undergo construction activities during the project's 15-year construction period. However, even if none of these 62 Basin-wide cumulative projects undergo construction while the project is under construction, a cumulatively considerable impact will occur because projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[10] As previously stated the Project-specific construction emissions presented in Section 4.3.6.2 exceed the applicable SCAQMD significance thresholds for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$; therefore, a cumulatively considerable impact will occur, despite any potential construction activity associated with another Basin-wide project.

Significance Level Before Mitigation: Project construction would result in cumulatively considerable and potentially significant cumulative air impacts.

Mitigation Measures: As identified in Section 4.3.6.2, **Mitigation Measures 4.3.6.2A**, **4.3.6.2B**, **4.3.6.2C** and **4.3.6.2D** to reduce construction emissions of criteria pollutants are required. The project will also be required to comply with SCAQMD Rules 402 and 403.

Significance Level After Mitigation: Despite the implementation of mitigation measures, emissions associated with construction of the project cannot be reduced below the applicable thresholds. In the absence of feasible mitigation to reduce the project's emission of criteria pollutants to below SCAQMD thresholds, potential air quality impacts resulting from construction of the Project and potential construction of any of the identified Basin-wide cumulative projects will still be considered cumulatively significant.

6.3.3.5 Localized Construction and Operational Air Quality Impacts

Impact: *The project's contribution to the cumulative exceedance of localized daily thresholds that may affect sensitive receptors would be cumulatively considerable.*

Threshold:	Would the project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? The applicable localized thresholds are: - 20 ppm (1 hour) and 9 ppm (8 hours) of CO during construction or operation; - 0.18 ppm (State 1 hour), 0.100 ppm (National 1 hour), and 0.030 ppm (Annual) of NOX during construction or operation; - 10.4 µg/m3 (24 hours) 1.0 µg/m3 (Annual) of PM10 during construction - 2.5 µg/m3 (24 hours) and 1.0 µg/m3 (Annual) of PM10; during operation and

[9] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

[10] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

- 2.5 µg/m3 (24 hours) of PM2.5 during operation

- During time periods when construction and operational activities occur at the same time, the SCAQMD recommends application of the significance thresholds for operations to assess the significance of the activities.

Cumulative Impact Analysis

The localized construction and operational analyses provided in Section 4.3.6.3, Localized Construction and Operational Air Quality Impacts, found that without mitigation, the project would exceed the localized significance thresholds for PM_{10} for one or more of the LST assessment years (2025, 2032, or 2040) analyzed under this revised LST assessment. Therefore, according to this criterion, the air pollutant emissions would result in a significant impact and could exceed or contribute to an exceedance of the ambient air quality standards for PM_{10}. Accordingly, projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[11]

Out of the 35 environmental documents that provided estimated project emissions, seven of those documents provided a quantitative analysis for localized construction thresholds. Of those seven quantitative localized construction threshold analyses, six of the identified projects were found to have a less than significant impact and one project was found to have a significant and unavoidable impact. However, none of these seven projects are within 500 feet of the project site. Despite the results of the environmental document review, due to the findings of the project's localized threshold analysis the air pollutant emissions from the project would result in a significant cumulative impact and could exceed or contribute to an exceedance of the ambient air quality standards for PM_{10}.

Significance Level Before Mitigation: Project construction and operation would result in cumulatively considerable significant air impacts.

Mitigation Measures: As identified in Section 4.3.6.2, **Mitigation Measures 4.3.6.2A**, **4.3.6.2B**, **4.3.6.2C** and **4.3.6.2D** to reduce construction emissions of criteria pollutants are required. The project will also be required to comply with SCAQMD Rules 402 and 403. Additionally, **Mitigation Measures 4.3.6.3A**, **4.3.6.3B**, **4.3.6.3C, 4.3.6.3D** and **4.3.6.3E** are required to reduce emissions of criteria pollutants during project operations.

Significance Level After Mitigation: Significant and unavoidable. After application of mitigation, the project would continue to exceed the localized significance thresholds at one or more of the existing residences located within the project boundaries for PM_{10} (24-hour and annual) all assessment conditions. In addition, the project would continue to exceed the localized significance thresholds at offsite receptors for PM_{10} (24-hour and annual). Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[12]

In summary, those residents inside and outside the project boundaries could be exposed to significant short-term and long-term PM_{10} concentrations on an ongoing basis. The health effects from particulate matter were discussed earlier and could include the following:

[11] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

[12] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.

- Particulate matter can cause the following health effects from short-term (24-hour) exposure: irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; and/or those with heart disease can suffer heart attacks and arrhythmias.

Particulate matter can cause the following health effects from long-term exposure (annual): reduced lung function; chronic bronchitis; changes in lung morphology; and/or death.

6.3.3.6 Long-Term Operational Emissions

Impact: *The project's contribution to the exceedance of cumulative operational thresholds would be cumulatively considerable.*

Threshold:	Would the project violate any AAQS or contribute to an existing or projected air quality violation; or expose sensitive receptors to pollutants? For long-term operations, the applicable daily thresholds are: - 55 pounds of VOC; - 55 pounds of NOX; - 550 pounds of CO; - 150 pounds of PM10; - 55 pounds of PM2.5; and - 150 pounds of SOX.

Cumulative Impact Analysis

Long-term air pollutant emission impacts that would result from the project are those associated with stationary sources and mobile sources involving any project-related change (e.g., emissions from the use of motor vehicles by project-generated traffic). Cumulative long-term impacts would take into consideration both the project related emissions and those generated by the 360 Basin-wide cumulative projects that have been identified.

As identified in Section 4.3.6.4 Long-Term Operation Emissions, operational emissions for the project would exceed SCAQMD daily operational thresholds for all criteria pollutants with the exception of SO_X for the "worst-case" 2018 scenario. Furthermore, emissions of VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ are significant after completion of Phase 1 and after full buildout. However, because the project-specific emissions exceed the SCAQMD significance thresholds, this project is considered by the SCAQMD to be cumulatively considerable, despite the potential operation of any of the identified Basin-wide cumulative projects.

Significance Level Before Mitigation: Operation of the project would result in potentially significant cumulative air impacts.

Mitigation Measures: Section 4.3.6.3 Localized Construction and Operational Air Quality Impacts identified **Mitigation Measures 4.3.6.3A** through **4.3.6.3E** that would reduce operational emissions of criteria pollutants associated with the project. Additionally, **Mitigation Measure 4.3.6.4A**, was provided

in Section 4.3.6.4 Long-Term Operational Emissions and is required to further reduce operational emissions.

Significance Level After Mitigation: Even with mitigation, operational emissions generated by the project are still significant. Mitigated operational project emissions in combination with the 360 cumulative projects that have been identified in the Basin, emissions of criteria pollutants will still exceed SCAQMD significance thresholds resulting in a significant and unavoidable cumulative operational air quality impact.

6.3.3.7 Impacts to Sensitive Receptors

Impact: *The project's contribution to the cumulative exposure of substantial pollutant concentrations on sensitive receptors would be cumulatively considerable.*

Threshold:	Would the project expose sensitive receptors to substantial pollutant concentrations? For localized air quality impacts, the applicable thresholds are: - 20 ppm (1 hour) and 9 ppm (8 hours) of CO during construction and operation; - 0.18 ppm (State 1 hour), 0.100 ppm National 1 hour), and 0.030 ppm (Annual) of NOX during construction and operation; - 10.4 µg/m3 (24-hours) and 1 µg/m3 (Annual) of PM10 during construction - 2.5 µg/m3 (24 hours) and 1.0 µg/m3 (Annual) of PM10 during operations; and - 2.5 µg/m3 (24 hours) of PM2.5 during operations. - During time periods when construction and operational activities occur at the same time, the SCAQMD recommends application of the significance threshold for operations. - For health risk impacts, the applicable thresholds are: - Maximum Individual Cancer Risk: An increased cancer risk greater than 10 in 1 million at any receptor location; - Cancer burden: An increase in cancer burden of 0.5 or - Non-cancer chronic hazard indices (HI): A cumulative increase for any target organ system exceeding 1.0 at any receptor location.

Cumulative Impact Analysis

Project-Specific Localized Risks

Cancer Risk for Sensitive/Residential Receptors. The analysis performed in Section 4.3.6.5 Impacts to Sensitive Receivers, found that the project would exceed the SCAQMD's cancer risk significance threshold of 10 in a million prior to the application of mitigation and would represent a significant impact. Construction impacts contribute the greatest proportion of the total impact presented in the findings presented in Section 4.2.6.5. In addition, the estimated maximum cancer risk anywhere in the model domain is less than the 10 in a million threshold, impact will therefore be less than significant without mitigation. Overall, without mitigation, the project is expected to have a significant impact mainly due to diesel PM emissions from construction activities.

Estimates of Cancer Risk for School Site Receptors. Section 4.3.6.5 found that the maximum cancer risk is at Ridgecrest Elementary School at less than 2 in a million. Therefore, impacts at schools are less than the 10 in one million significance threshold prior to mitigation and are less than significant.

Estimates of Cancer Risk for Worker Receptors. The highest worker cancer risk estimates, from the project, prior to the application of mitigation is less than 5 in one million and is at an onsite location. Therefore, cancer risk for worker receptors anywhere in the revised HRA's study area is less than the 10 in one million significance threshold. Projected impacts are less than significant without mitigation.

Estimates of Cancer Burden. Cancer risks, from the project, were estimated at the geographical center (centroid) of census tracts that are within the study area of the HRA. For the 70-year exposure duration with the inclusion of the Current OEHHA Guidance, the cancer burden is estimated to be 0.09 out of a population of about 63,090 individuals that were estimated to have a cancer risk of 1 in a million or more. The SCAQMD has established a threshold for cancer burden of 0.5. Therefore, the project would not exceed the SCAQMD's cancer burden significance threshold prior to the application of mitigation.

Regional Freeway Network Risk. The analysis presented in Section 4.3.6.5 found that based on the results for the construction plus operation scenario, without mitigation, only a small segment (approximately one mile) along SR60 that is immediately north of the project boundary will potentially have an incremental cancer risk exceeding the SCAQMD 10 in one million thresholds; at an approximate distance of 2.5 miles away from the project boundary, the potential increment cancer risk along SR60 would be less than 2 in one million. Based on results for 30 years of the full project buildout scenario, without mitigation, no segment along SR60 would exceed the 10 in one million cancer risk threshold; at a distance of less than two miles from the project boundary, the incremental cancer risk is less than 2 in one million.

*Informational Purposes: Morbidity and Mortality***.** Exposure to the Project's DPM emissions prior to mitigation would result in an increase in mortality of approximately 0.00011 additional cases per year at the location where the project has its maximum impact from DPM emissions or 0.001 additional cases over all of the census tracts contained in the modeling domain.

Section 4.3.6.5 summarizes the estimates of the various morbidity health endpoints due to the emissions from the project without mitigation. There is no established threshold or approved methodology for calculating morbidity and mortality; however, the project would not result in a single new added case of a quantified health endpoint either at location where the impact would be greatest or cumulatively over the entire air dispersion modeling domain examined in this assessment.

Out of the 360 Basin-wide cumulative projects were identified, seven out of those projects provided a quantified health risk assessment and less than significant impacts were identified for all seven projects. However, because the project-specific emissions exceed the SCAQMD significance thresholds, this project is considered by the SCAQMD to be cumulatively considerable, despite the potential operation of any of the identified Basin-wide cumulative projects.

Significance Level Before Mitigation: Operation of the project would result in potentially significant cumulative air impacts.

Mitigation Measures: The mitigation measures previously identified in Section 4.3 are required (**Mitigation Measures 4.1.6.1A, 4.3.6.2A**, **4.3.6.2B**, **4.3.6.2D, 4.3.6.3A, 4.3.6.3B, 4.3.6.3C, 4.3.6.3D,** and **4.3.6.3E**) to reduce construction and operational emissions of criteria pollutants would reduce the estimated cancer risks associated with the project. Additionally, **Mitigation Measure 4.3.6.5A** is required to ensure that significant health risk does not occur at on-site residential receptors.

Significance Level After Mitigation: The cancer risks are substantially lower after mitigation. The SCAQMD cancer risk significance threshold would not be exceeded in any areas outside of the project boundary. The large reduction in cancer risk after mitigation is attributable principally to the reduced diesel PM associated with the commitment to Tier 4 construction equipment. The impact of this

mitigation is largely felt during the first 3 to 5 years of construction when the “Current OEHHA Guidance” assigns large age sensitivity factors to the first few years of the 30-year exposure duration. The cancer risk value at all sensitive receptor locations will be below the significance threshold after mitigation, the cancer risk impact to sensitive receptors will therefore be less than significant and not result in a cumulatively considerable impact.

6.4 Biological Resources

Cumulative effects to biological resources are described in this section. A summary of the WLC project's potential impacts to biological resource issues is provided in Section 6.4.1. The cumulative impact geographic area for biological resource issues is provided in Section 6.4.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the biological resources issues are discussed in Section 6.4.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.4.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the city will fully build out by 2040, the cumulative impact analysis assumes worse case cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Figures 6.4-1 and 6.4-2 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they would contribute to a cumulatively considerable impact to biological resources. These potentially cumulative impacts are documented in the following section.

6.4.1 Project Impact Findings

The project's effects to biological resources are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.4 of the Revised Sections of the FEIR is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as endangered or threatened in local or regional plans, policies, or regulations, or by the CDFW or USFWS; **Less than Significant with Mitigation, Section 4.4.6.1.**
- Have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS; **Less than Significant with Mitigation, Section 4.4.6.4.**
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS; **Less than Significant with Mitigation, Section 4.4.6.3.**
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct

removal, filling, hydrological interruption, or other means; **Less than Significant with Mitigation, Section 4.4.6.3.**

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native or resident migratory wildlife corridors, or impede the use of native wildlife nursery sites; **Less than Significant, Section 4.4.5.2.**
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. **Less than Significant, Section 4.4.5.1; Less than Significant with Mitigation Section 4.4.6.2.**

As shown there are no unmitigated project-specific significant and unavoidable impacts to biological resources identified in the FEIR.

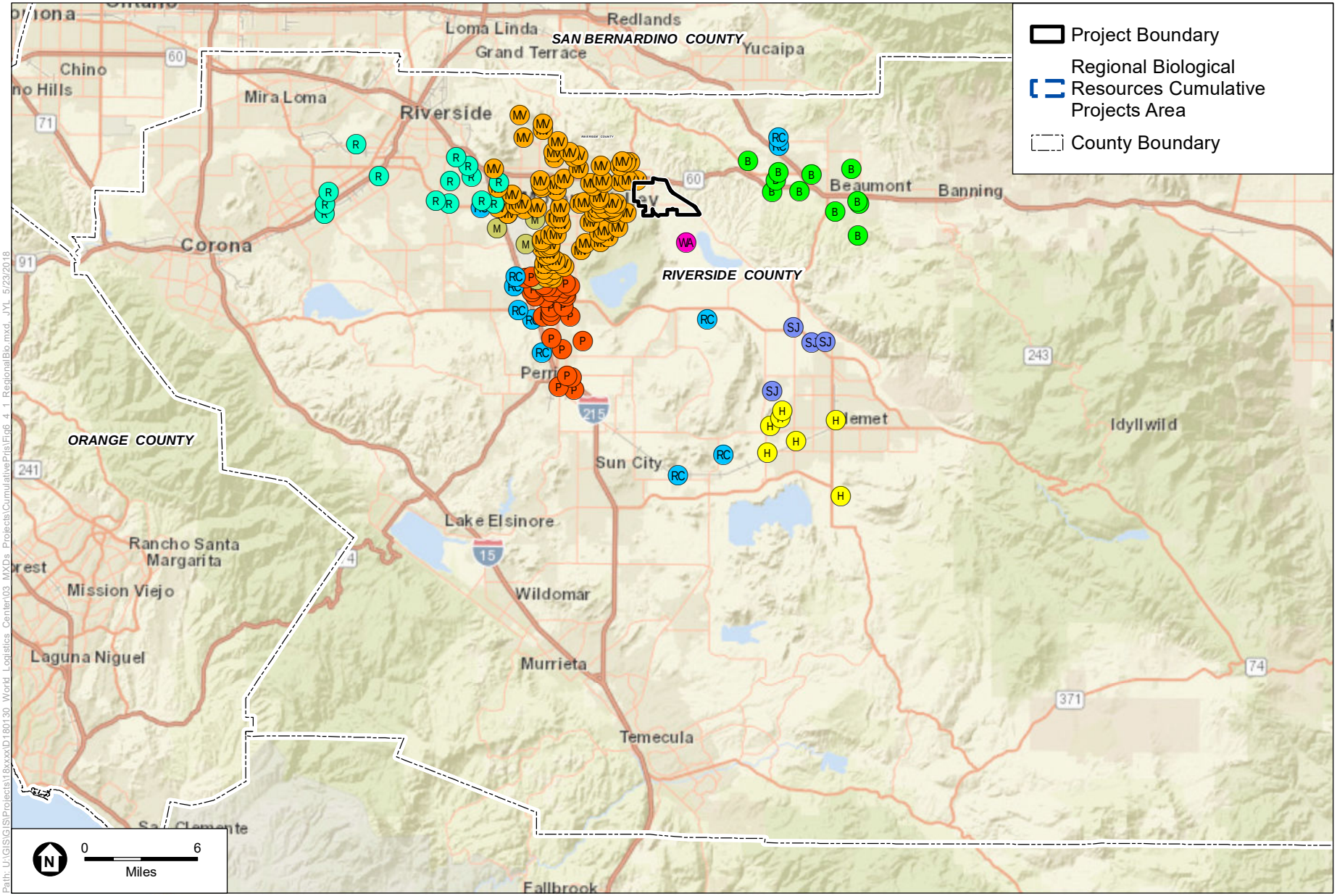
6.4.2 Geographic and Temporal Scope

The cumulative impact geographic area for biological resources is the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area, which also includes the San Jacinto Wildlife Area (SJWA). Refer to Figure 6.4-1 for projects that could potentially result in a cumulative impact to the SJWA. The MSHCP establishes a comprehensive, multi-jurisdictional program focused on the conservation of 146 species and their habitats in western Riverside County. As a permittee, the City of Moreno Valley reviews all public and private development and construction projects and other land use plans/activities within the MSHCP area to ensure compliance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP. The MSHCP is designed to mitigate cumulative impacts to biological resource across the MSHCP planning area through a variety of methods, including fee payment, direct habitat acquisition and conservation easement dedication.

A lead agency may also determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable "if the project will comply with the requirements in a previously approved plan or mitigation program ... that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency." [Guidelines § 15064(11) (3).]

The project and the other cumulative projects fall within the jurisdiction of the MSHCP. The MSHCP involves the assembly and management of a 500,000-acre Conservation Area for the conservation of natural habitats and their constituent wildlife populations. The MSHCP permits development of lands and take of species “in exchange for the assembly and management of a coordinated MSHCP Conservation Area” (Riverside County, 2004). The Implementing Agreement authorized the "take of 146 species covered by the MSHCP (termed “covered species”), including state and federally listed species, as well as other identified sensitive species." The “take” authorization includes impacts to the habitats of the covered species. The MSHCP requires any new development to pay fees to support the financing for the MSHCP, to be applied toward acquisition and management of Conservation Area land. The fees are intended to meet mitigation requirements for the California Environmental Quality Act, the federal Endangered Species Act, and the California Endangered Species Act.

Cumulative projects identified within the biological resources cumulative impact area are summarized in Table 6.4-1 and Figure 6.4-1.



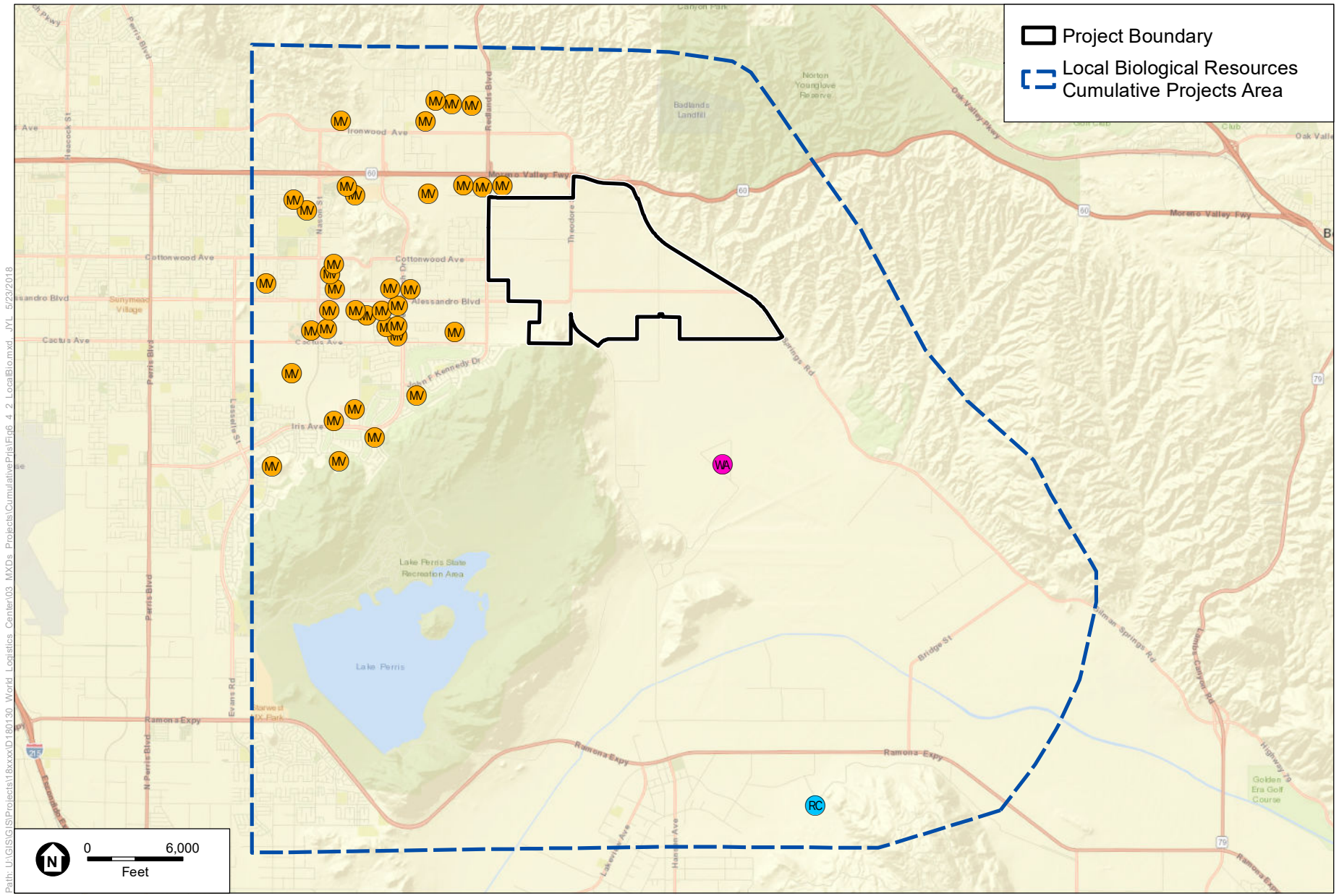
SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.4-1

Regional Biological Resources Cumulative Projects Area

ESA



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.4-2

Local Biological Resources Cumulative Projects Area

ESA

Table 6.4-1: Biological Resource Cumulative Project Summary

Project ID	Project Name	Environmental Document Summary
B-2	**Tournament Hills 3**	**EIR**
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. There is a significant impact on the biological resources in the area. The loss of Sage grub and a golden eagle habitat is unmitigatable and significant.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. There is a significant impact on the biological resources in the area, even after mitigation measures. The EIR stated that the impact will require a Statement of Considerations.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152.9 acre property's General Plan land use designation from low density residential to Business Park. There is no significant impact on the biological resources in the area.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. There is no impact on the biological resources in the area.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. There is no impact on the biological resources in the area with mitigation measures.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. There is no impact on the biological resources in the area.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. There is a less than significant to no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. There would be a potentially significant impact unless mitigation is incorporated on the biological resources in the area.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. There is a significant impact on the biological resources in the area.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. There is no impact on the biological resources in the area.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. There is no impact on the biological resources in the area.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. There is a cumulative impact to the biological resources in the area.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. After mitigation measures, there is no impact on the biological resources in the area.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. There is a less than significant impact on the biological resources in the area.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The supplemental EIR does not mention an impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. With mitigation measures, there is a less than significant to no impact on the biological resources in the area.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR the project would result in the development of a 130 acre business park. There is no impact on the biological resources in the area.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. There is a less than significant impact on the biological resources in the area.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. There is a less than significant impact on the biological resources in the area.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. There is ales than significant to no impact on the on the biological resources in the area.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. There is no impact on the biological resources in the area with mitigation measures.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the biological resources in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the biological resources in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the biological resources in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the biological resources in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the biological resources in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact on the biological resources in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the biological resources in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the biological resources in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the biological resources in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is a less than significant to no impact on the biological resources in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the biological resources in the area.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. With mitigation measures, there is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is no impact on the biological resources in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant impact on the biological resources in the area with mitigation measures.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the biological resources in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the biological resources in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the biological resources in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the biological resources in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no biological impact on the resources in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the biological resources in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the biological resources in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is less than significant to no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the biological resources in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the biological resources in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the biological resources in the area with mitigation measures.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the biological resources in the area with mitigation measures.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is no impact on the biological resources in the area.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is less than a significant to not impact on the biological resources in the area with mitigation measures.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact on the biological resources in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is a less than significant impact on the biological resources in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact on the biological resources in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically state whether or not that is an impact on the biological resources in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is a less than significant to no impact on the biological resources in the area with mitigation measures.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact on the biological resources in the area with mitigation measures.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the biological resources in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the biological resources in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is a less than significant impact on the biological resources in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is a less than significant impact on the biological resources in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is a less than significant impact on the biological resources in the area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. The resolution does specifically mention an impact on the biological resources in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is a less than significant to no impact on the biological resources in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states there will be no significant impact to the environment in the area. It does not specifically mention if there is an impact on the biological resources in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the biological resources in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the biological resources in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is no impact on the biological resources in the area.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant to no impact on the biological resources in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the biological resources in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is a less than significant to no impact on the biological resources in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the resources in the area.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the biological resources in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the biological resources in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is a less than significant impact on the biological resources in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant to no impact on the biological resources in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is a less than significant to no impact on the biological resources in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the biological resources in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the biological resources in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resolution stated that there would be no significant impact on the environment. It did not specifically mention the impact on biological resources in the area.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. The notice states that there will be no significant impact on the environment. It does not specifically mention an impact on the biological resources in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the biological resources in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the biological resources in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is a less than significant to no impact on the resources in the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the biological resources in the area with mitigation measures
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is no impact on the biological resources in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the biological resources in the area.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the biological resources in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the biological resources in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the biological resources in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution stated that there was no significant impact on the environment. It did not specifically mention an impact on the biological resources in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the biological resources in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there is no significant impact on the environment in the area. It does not specifically mention an impact on the biological resources in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution does not mention whether or not there is an impact on the environment in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the biological resources in the area with mitigation measures.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the biological resources in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the biological resources in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the biological resources in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the biological resources in the area.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. There is a less than significant to no impact on the biological resources in the area.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. There is no impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. There is no impact on the biological resources in the area.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. There is a less than significant impact on the biological resources in the area.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. There is a less than significant impact on the biological resources in the area.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. There is a potentially significant impact to the biological resources in the area.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. There is a less than significant impact on the biological resources in the area with mitigation measures.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. There is a potentially significant impact on the biological resources, including candidate, sensitive, or special status species, in the area.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. There is a less than significant impact on the biological resources in the area.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. There is a less than significant impact on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. There is a potential significant impact on the biological resources in the area.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. There is no impact on the biological resources in the area.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. There is a potentially significant impact on the biological resources in the area unless mitigation is incorporated
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. There is a potentially significant impact on the biological resources in the area unless mitigation is incorporated.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. There is a less than significant impact on the biological resources in the area.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. There is a less than significant impact on the biological resources in the area.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. There is a less than significant impact on the biological resources in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. There is a less than significant impact on the biological resources in the area with mitigation measures.
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area. There is a less than significant impact on the biological resources in the area with mitigation measures.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. There is a less than significant impact on the biological resources in the area with mitigation measures.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The public slides do not mention any significant impacts on the biological resources in the area.

Project ID	Project Name	Environmental Document Summary
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. There is a less than significant impact on the biological resources in the area.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. There is a less than significant impact on the biological resources in the area with mitigation measures.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. There is no impact on the biological resources in the area.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. The response to late comments do not mention an impact on the biological resources in the area.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. There is a potentially significant impact on the biological resources in the area.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. There is a less than significant impact on the biological resources in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. There is no impact on the biological resources in the area.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. There is a less than significant impact on the biological resources in the area with mitigation measures.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is a less than significant impact on the biological resources in the area with mitigation measures.

6.4.3 Cumulative Impact Evaluation

There are very few cumulative projects that would directly affect the SJWA. RC-1 and RC-5, as identified in Table 6.0 have the potential to effect the SJWA, although there is no project description information available for those cumulative projects. Similar to the project, each of these identified cumulative projects are required to mitigate impacts to biological resources including the MSHCP and the SJWA. A review of available CEQA documents in the identified biological resources cumulative project area indicates that these identified projects mitigate impacts to biological resources through a combination of project design features, mitigation measures and payment of MSHCP fees. The northern portion of the SJWA Area is designated as Agriculture in the San Jacinto Wildlife Area Management Plan and the existing use is fallow agricultural land. As such, sensitive species associated with the San Jacinto Wildlife Area are located in the central and southern portion of the wildlife area, over one-mile south of the WLC project boundary and further away from the identified cumulative projects. Existing ongoing activities within and adjacent to the San Jacinto Wildlife Area include traffic along perimeter roadways and substantial noise associated with the periodic blow-down of the SEMPRA pressurization station and permitted hunting activities, including short gun blasts.

The cumulative impact analysis includes an evaluation of the above identified projects within the identified cumulative impact area, and any associated CEQA documents. The project has the potential to contribute to cumulatively considerable impacts to Endangered, Threatened or Special-Status species, riparian habitats, federally protected Waters of the U.S., and to an adopted conservation plan.

With the implementation of the recommended mitigation measures, cumulative impacts to biological resources would not be cumulatively significant or considerable.

The cumulative projects, when considered together with the project, would not result in a cumulatively considerable effect on the MSHCP or the SJWA. Therefore, when considered in addition to the anticipated impacts of other projects in the cumulative scenario, the project's incremental contribution to impacts to biological resources would not be cumulatively considerable, and cumulative impacts to biological resources would be less than significant.

6.4.3.1 Adversely Affect Endangered or Threatened Species

Impact: *The project contribution to potential cumulative effects on habitat modifications, on any species identified as endangered or threatened in local or regional plans, policies, or regulations, or by the CDFW or USFWS would be cumulatively considerable.*

Threshold:	Would the project have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as endangered or threatened in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Cumulative Impact Analysis

There are 17 plant and animal species that are designated as endangered or threatened by State and/or Federal authorities that have the potential to occur within the general vicinity of the project area (Table 4.4-6) and the MSHCP area. Only the coastal California gnatcatcher has been observed within the project site. Coastal California gnatcatcher is a Covered Species in the MSHCP and is considered Adequately Conserved. Consistent with the MSHCP requirements, Mitigation Measure **4.4.6.4A** prevents suitable habitat from disturbance during the breeding season.

Consistency with the MSHCP would provide assurance that the project would be in compliance with the provisions of the federal Endangered Species Act, the California Endangered Species Act, and the Natural Community Conservation Planning Act; and would adequately provide for the conservation and protection of the covered species adequately conserved and their habitats in the MSHCP Plan Area. *State CEQA Guidelines* Section 15064(h)(3) indicates that a lead agency may also determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable "if the project will comply with the requirements in a previously approved plan or mitigation program ... that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located." In addition, *State CEQA Guidelines* Section 15130(a)(3) concludes that "A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."

The WLC site and some offsite facilities border the Core Reserve Area for the Stephens' kangaroo rat HCP to the south, but the area itself is not located within a core area. Although this area will be subject to development, it is not close enough to the Core Reserve Area to be directly impacted and is not close enough to have any indirect impacts as well. The project site and offsite facilities are located within the fee area of the SKR HCP. The SKR HCP is managed as part of the MSHCP Conservation Area and significant cumulative impacts to SKR are addressed through adherence to the Stephens' kangaroo rat HCP's Implementing Agreement and payment of the County's per-acre mitigation fee. A lead agency may also determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable "if the project will comply with the requirements in a previously approved plan or mitigation program ... that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located." In addition, the Moreno Valley Municipal Code section 3.48.040 imposes MSHCP fees and section 8.60.070 imposes SKR fees on all projects within the City.

Cumulative projects that would occur on previously undeveloped land supporting endangered or threatened species would be required to identify and mitigate any potentially significant impacts to those biological resources. Cumulative projects within the MSHCP Plan Area, the purpose of which is to maintain viable populations of covered species, including those listed as endangered or threatened, would be subject to consistency with the MSHCP as well as subject to consistency for any relevant HCPs. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact endangered or threatened species, yet these projects would be required to pay the appropriate MSHCP fees. The combined construction of projects within the vicinity of the project could deprive some species of a significant amount of habitable space. Related projects that would potentially affect threatened or endangered species would also be subject to the same regulatory requirements as the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on sensitive species would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, for the reasons described above, cumulative adverse effects on threatened and endangered species would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects are required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. Those mitigation measures are specific to the Villages at Lakeview project impacts and would be independent of those required for the WLC project. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.4.6.1A, 4.4.6.1B and 4.4.6.4A is required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the mitigation measures, potential impacts to listed endangered and threatened species would be reduced. Mitigation Measures 4.4.6.1A and 4.4.6.1B includes development setbacks from the SJWA northern boundary and water quality and erosion control facilities to minimize downstream impacts. Mitigation Measures 4.4.6.4A requires avoidance of impacts to nesting birds, including the Federally Threatened coastal California gnatcatcher. Through the implementation of the above mitigation measures, the project contribution to potential cumulative impacts would be less than cumulatively considerable.

6.4.3.2 Adversely Affect Candidate, Non-listed Sensitive, or Special-Status Species

Impact: *The project contribution to potential cumulative effects on habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS would be cumulatively considerable.*

Threshold:	Would the project have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Cumulative Impact Analysis

Consistency with the MSHCP would provide assurance that the project would be in compliance with the provisions of the federal Endangered Species Act, the California Endangered Species Act, and the Natural Community Conservation Planning Act; and would adequately provide for the conservation and protection of the covered species adequately conserved and their habitats in the MSHCP Plan Area. A lead agency may also determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable "if the project will comply with the requirements in a previously approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

The WLC Specific Plan area overlaps with the MSHCP Survey Areas for Narrow Endemic Plant Species as well as Criteria Area Sensitive Plant Species. Focused surveys for these species did not produce positive findings within the project site and these species are not anticipated to occur. The implementation of the WLC project would not affect the habitat or result in a direct impact for any special status plant species.

Focused surveys for Los Angeles pocket mouse did not find this species within the project site and the closest known location for the species is in the southern portion of the SJWA for which there is no suitable habitat connection. However, Mitigation Measure 4.4.6.4E is recommended to prevent impacts to the species from occurring with the implementation of the Specific Plan.

Burrowing owl has been observed within the WLC site on several occasions, most recently in 2018. The MSHCP requires specific protective action for this species; as such, Mitigation Measure 4.4.6.4D provides for pre-construction surveys and the preparation of a relocation plan if burrowing owl is found. In addition, the construction of berms around detention basins where burrowing owls have been observed to use will provide nesting opportunities and the conservation of 74.3 acres within the Specific Plan will provide the potential to construct artificial burrows for use in the relocation plan.

Migratory and nesting birds are known from the project site because suitable nesting habitat is available for several bird species. Mitigation measure 4.4.6.4A is recommended to minimize potential impacts to nesting birds.

Raptor foraging habitat will be lost through the construction of the WLC and cumulative projects. The MSHCP incorporates suitable raptor foraging habitat within the MSHCP conservation areas. The objective of the long-range planning is to maintain sustainable populations within the MSHCP boundary. As a result of conservation planning within the MSHCP area enabled through the contribution of fees required for approved development, cumulative impacts to raptor foraging habitat will not be considerable.

Cumulative projects that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Cumulative projects within the MSHCP Plan Area would be subject to consistency with the MSHCP fee requirements as well as subject to consistency for any relevant HCPs. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources. The combined construction of projects within the vicinity of the project could deprive some species of a significant amount of habitable space. Related projects that would potentially affect local or regional candidate, sensitive, or special status species subject to the same regulatory requirements as the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on sensitive species would be mitigated to the extent feasible in accordance with CEQA

and other applicable legal requirements. Therefore, for the reasons described above, cumulative adverse effects on local or regional candidate, sensitive, or special status species would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects reviewed were required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.4.6.4A through 4.4.6.4K is required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the mitigation measures, potential impacts to candidate, non-listed sensitive, or special-status species would be reduced. Mitigation Measures 4.4.6.4A through 4.4.6.4K includes protection for nesting birds, including burrowing owl, development of a resource management plan, landscape buffer adjacent to the SJWA, and payment of impact fee to the MSHCP. Through the implementation of the above mitigation measures, the project contribution to potential cumulative impacts would be less than cumulatively considerable.

6.4.3.3 Adversely Affect Riparian Habitat or Other Sensitive Natural Communities

Impact: *The project contribution to potential cumulative effects on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS would be cumulatively considerable.*

Threshold:	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS?

Cumulative Impact Analysis

Riparian or riverine areas are lands that contain habitat dominated by trees, shrubs, and persistent emergent plants, which occur close to or depend upon soil moisture from a nearby water source; or areas with fresh water flowing during all or a portion of the year. Drainage Feature 7, 8, 9, 12, and 15 within the WLC project are considered riparian/riverine areas, as defined by MSHCP. If impacts to any of these areas cannot be avoided, a Determination of Biologically Equivalent or Superior Preservation (DBESP) report and relevant mitigation will be required.

Mitigation Measure 4.4.6.3A will help ensure there will be no significant impacts to riparian areas associated with Waters of the State as a result of future development within the project. In addition, Mitigation Measure 4.4.6.3B will provide mitigation in the form of onsite preservation of riparian areas and/or a combination of compensation through purchase and placement of lands with riparian/riverine

habitat into permanent conservation through a conservation easement and/or restoration or enhancement efforts at offsite or onsite locations. The intent of the regulatory permitting for Waters of State is a no net loss of these resources and cumulative impacts would be less than considerable.

Cumulative projects that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Cumulative projects within the MSHCP Plan Area would be subject to consistency with the MSHCP as well as subject to consistency for any relevant HCPs. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources. Related projects that would potentially affect habitat would also be subject to the same requirements of CEQA as the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on riparian habitat or other sensitive natural communities would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. With the implementation of the MSHCP Conservation Areas, sustainable populations for covered species within conserved habitats would result and cumulative impacts would be less than considerable. Therefore, for the reasons described above, cumulative adverse effects on sensitive habitat would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects are required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.4.6.3A through 4.4.6.3C is required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the mitigation measures, potential impacts to riparian habitat or other sensitive natural communities would be reduced. Mitigation Measures 4.4.6.3A through 4.4.6.3C includes the requirement to obtain regulatory jurisdictional permits, creation or enhancement of riparian resources, development of a resource management plan, and demonstration that the mitigation resources are equivalent or better than the jurisdictional resources impacted. Through the implementation of the above mitigation measures, the project contribution to potential cumulative impacts would be less than cumulatively considerable.

6.4.3.4 Adversely Affect Federally Protected Wetlands or Waters of the U.S.

Impact: *The project contribution to potential cumulative effects on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means would be cumulatively considerable.*

Threshold:	Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh,

vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Cumulative Impact Analysis

A total of 15 primary drainage features were identified during this survey and a number of sub-drainages or tributaries were also identified. Jurisdiction for each drainage and/or sub-drainage or tributary was evaluated for jurisdiction under Section 404 and 401 of the Clean Water Act (CWA) as administered by USACE and RWQCB, respectively. Two of the 15 features are subject to the jurisdiction of the USACE and/or RWQCB. In addition, no jurisdictional wetlands or isolated wetlands were identified within the project site. Mitigation Measure 4.4.6.3A will help ensure there will be no significant impacts to riparian areas associated with Waters of the U.S. as a result of future development within the project. In addition, there would be no net loss of riparian resources.

Cumulative projects that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Cumulative projects within the MSHCP Plan Area would be subject to consistency with the MSHCP as well as subject to consistency for any relevant state and federal wetlands regulations. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources. However, it is anticipated that related projects that would potentially affect wetlands would also be subject to the same requirements of the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on wetlands would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, for the reasons described above, cumulative adverse effects on wetlands would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects are required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.4.6.3A through 4.4.6.3C is required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the mitigation measures, potential impacts to federally protected wetlands or waters of the U.S. would be reduced. Mitigation Measures 4.4.6.3A through 4.4.6.3C includes the requirement to obtain regulatory jurisdictional permits, creation or enhancement of riparian resources, development of a resource management plan, and demonstration that the mitigation resources are equivalent or better than the

jurisdictional resources impacted. Through the implementation of the above mitigation measures, the project contribution to potential cumulative impacts would be less than cumulatively considerable.

6.4.3.5 Interfere with Wildlife Movement

Impact: *The project contribution to potential cumulative effects on the movement of any native resident or migratory fish or wildlife species or with established native or resident migratory wildlife corridors, or impede the use of native wildlife nursery sites would be less than cumulatively considerable.*

Threshold:	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native or resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Cumulative Impact Analysis

The project area contains no significant cover of native plant communities and currently experiences heavy disturbance associated with agricultural activities. Additionally, the project area is adjacent to SR-60 and Gilman Springs Road on the north and east and is bordered by urban development on the west. The nearest linkage area as identified under the MSHCP is Proposed Linkage 5 and is located approximately 3 miles north of the project and approximately 3.6 miles south of the project is Proposed Constrained Link 20. The development of the project site will not impede the movement of any wildlife; therefore, the project will not affect any wildlife movement corridor.

Native wildlife will experience incremental adverse impacts from traffic along Gilman Springs Road as the WLC project develops in the future, but these impacts would be less than significant when the County coordinates with the Resource Conservation Authority (RCA) and implements wildlife movement corridors between Core H and proposed Core 3 when designing and improving Gilman Springs Road.

Development of the project would not directly have any significant impact on wildlife movement in the area, and would not fragment habitat or adversely affect wildlife movement through the surrounding areas. It is determined that the project would not impede or minimize any significant wildlife corridor for the target species associated within the Reche Canyon/Badlands Area plan. None of the cumulative projects would interfere with wildlife movement in the region.

Direct and indirect impacts of the project on the MSHCP and SJWA would be less than significant with mitigation, and the regional (cumulative) implications of the project can be addressed through the fee payment program of the MSHCP because it provides a regional and comprehensive approach to conservation planning. Through the implementation of the stated mitigation for project-specific impacts, and the payment of required MSHCP mitigation fees, no significant cumulative effect on biological resources would result from the development of the proposed uses with implementation of the identified program mitigation measures.

Cumulative projects that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Cumulative projects within the MSHCP Plan Area would be subject to consistency with the MSHCP, including wildlife movement corridors, as well as subject to consistency for any relevant HCPs. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources. The combined construction of projects within the vicinity of the project could result in constrained wildlife movement. Related projects that would potentially affect wildlife movement would also be subject to the same requirements of CEQA as the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on wildlife movement would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, for the reasons described above, cumulative adverse effects on wildlife movement would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects are required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.4.3.6 Conflict with Adopted Policies, Ordinances or Habitat Conservation Plans

Impact: *The project contribution to potential cumulative effects on local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan would be cumulatively considerable.*

Threshold:	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

Cumulative Impact Analysis

The WLC project site is located within the Stephen's Kangaroo Rat (SKR) Habitat Conservation Plan (HCP). Core Areas have been designated for the conservation of this species. The project site is not located within an SKR Core Area. The SKR HCP is managed as part of the MSHCP Conservation Area. Moreno Valley Municipal Code section 8.60.070 imposes SKR fees on all projects within the City.

Within the MSHCP, the project site is located within the Reche Canyon/Badlands Area of the MSHCP. Development of the project site would not conflict with the conservation goals established by the MSHCP for Cell Group X or Cell Group E. In addition, no conflict from development would occur in relation to the Reche Canyon/Badlands Area Plan, the Area Plan Subunit 4, the Area Plan Subunit 3, Proposed Core 3, or Existing Core H.

No development is proposed within the portion of the project site that lies adjacent to Cell Group D and the SJWA. Development that will be adjacent to the SJWA property may cause significant indirect impacts to species within the SJWA. The project site is not adjacent to any Cores or Linkages identified in the MSHCP. However, it is adjacent to the SJWA and is subject to the project guidelines provided in MSHCP Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface). The project is also required to adhere to the Best Management Practices (BMPs) found in Appendix C of the MSHCP.

The project is not located within any Amphibian, Mammalian, or Special Linkage Areas identified by the MSHCP. The project is in an area requiring burrowing owl surveys, is within the MSHCP Criteria Area Species Survey Area (CASSA), and is within the Narrow Endemic Plant Species Survey Area (NEPSSA). Surveys the CASSA and NEPSSA resulted in the lack of observation of these species. Burrowing owl has been observed within the project site.

The WLC project site is located within the Stephen's Kangaroo Rat (SKR) Habitat Conservation Plan (HCP). Core Areas have been designated for the conservation of this species; however, the project site is not located within an SKR Core Area. The SKR HCP is managed as part of the MSHCP Conservation Area and significant cumulative impacts to SKR are addressed through the compliance with the MSHCP provisions.

The effects of the project, in combination with other cumulative projects in the geographic area, could combine to cause or contribute to significant cumulative effects to biological resources. In particular, identified cumulative projects that are located within or near the northern portion of the San Jacinto Wildlife Area could have significant effects on special status species, sensitive vegetation communities, and wildlife movement documented in the MSHCP and the San Jacinto Wildlife Area Management Plan. It should be noted that cumulative projects are required to adhere to and be consistent with the goals and objectives established in the MSHCP, including the payment of MSHCP fees.

Cumulative projects that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Cumulative projects within the MSHCP Plan Area would be subject to consistency with the MSHCP as well as subject to consistency for any relevant HCPs and resource protection policies. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources related policies. However, it is anticipated that related projects that would potentially affect resource protection policies would also be subject to the same requirements of these policies as the project. These determinations would be made on a case-by-case basis, and the effects of cumulative development on resource protection policy would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, for the reasons described above, cumulative adverse effects on resource protection policies would be less than significant.

The CEQA documents identified in Tables 6.4-1 and 6.4-2 have been reviewed to determine if the identified cumulative projects in conjunction with the project could result in cumulatively considerable effect on biological resources. All cumulative projects are required to comply with the MSHCP and pay applicable MSHCP fees which are in turn utilized by the RCA to implement programs and habitat acquisition to minimize cumulative impacts to biological resources. In particular, the EIR for the Villages at Lakeview project (RC-5) located in unincorporated Riverside County south of the SJWA was reviewed, as it is the largest project in the biological resources cumulative impact area and is immediately south and west of the SJWA. The Villages at Lakeview project proposes a large mixed-use development that is located within numerous MSHCP Criteria Cells with specific species and habitat conservation requirements within and adjacent to it's boundary. The Villages at Lakeview project is also adjacent to the wetlands portion of the SJWA. The World Logistics Center project does not have any MSHCP conservation requirements and is located a substantial distance from the core wetlands within the SJWA. The Villages at Lakeview EIR proposes several mitigation measures to minimize project and cumulative impacts to the SJWA and comply with the MSHCP. As a result, the Villages at Lakeview project in conjunction with the World Logistics Center project do not constitute a cumulatively considerably effect on the SJWA.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.4.6.2B and 4.4.6.3B is required as provisions of the MSHCP.

Significance Level After Mitigation: Less than significant impact. With the implementation of the mitigation measures, potential impacts to federally protected wetlands or waters of the U.S. would be

reduced. Mitigation Measures 4.4.6.2A and 4.4.6.2B includes the requirement to conduct a focused plant survey, and demonstration to the Riverside County Regional Conservation Authority compliance with the provisions of the MSHCP. Through the implementation of the above mitigation measures, the project contribution to potential cumulative impacts would be less than cumulatively considerable.

6.5 Cultural and Paleontological Resources

Cumulative effects to cultural and paleontological resources are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to cultural and paleontological resource issues is provided in Section 6.5.1. The geographic and temporal scopes for cumulative impacts to cultural and paleontological resource issues is provided in Section 6.5.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the cultural and paleontological resources issues are discussed in Section 6.5.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.5.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.5 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts could cause or contribute to a significant cumulative impact to cultural and paleontological resources.

6.5.1 Project Impact Findings

The project's effects to cultural and paleontological resources are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.5 of the Revised Final Programmatic EIR Sections (RFPEIRS) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Result in any disturbance of human remains, including those interred outside of formal cemeteries? **Less than Significant, Section 4.5.5.1.**
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to *CEQA Guidelines* Section 15064.5? **Less than Significant with Mitigation, Section 4.5.6.1, Impact 4.5.6.1.**
- Cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5? **Less than Significant with Mitigation, Section 4.5.6.2, Impact 4.5.6.2.**
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less than Significant with Mitigation, Section 4.5.6.3, Impact 4.5.6.3.**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to cultural and paleontological resources identified in the FEIR.

6.5.2 Geographic and Temporal Scope

Cumulative impacts to cultural and paleontological resources could result from the project in conjunction with other past, present and future projects located within the tribal boundaries that encompass the project site. Although tribal boundaries overlap, it is appropriate to identify the geographic area for cultural and paleontological resources as Western Riverside County because of (1) the area would be expected to contain archaeological, historic, and paleontological resources similar to the area that encompasses the project area, (2) coherence in regional past Native American occupation and land use, (3) similarity in patterns of historic development, and (4) similarity in the geological formations that contain paleontological resources. The cumulative projects geographic boundary for cultural and paleontological resources is shown in Figure 6.5-1. The projects listed within the cultural and paleontological resources impact are is listed in Table 6.5-1.

The project would contribute to cumulative impacts to cultural and paleontological resources starting from when project-related ground disturbance begins and lasting until the conclusion of the construction phase: once construction is complete, operation and maintenance of the project would not disturb the surface of the site in ways that could cause an impact on subsurface resources. The project would contribute to cumulative impacts to historical resources from the initiation of removal activities of the rural residential structures and associated out-buildings that may be of historic-age from the project site.

6.5.3 Cumulative Impact Evaluation

6.5.3.1 Human Remains

Impact: *The project contribution to the potential disturbance of human remains, including those interred outside of formal cemeteries would be less than cumulatively considerable.*

Threshold:	Would the project disturb any human remains, including those interred outside of formal cemeteries?

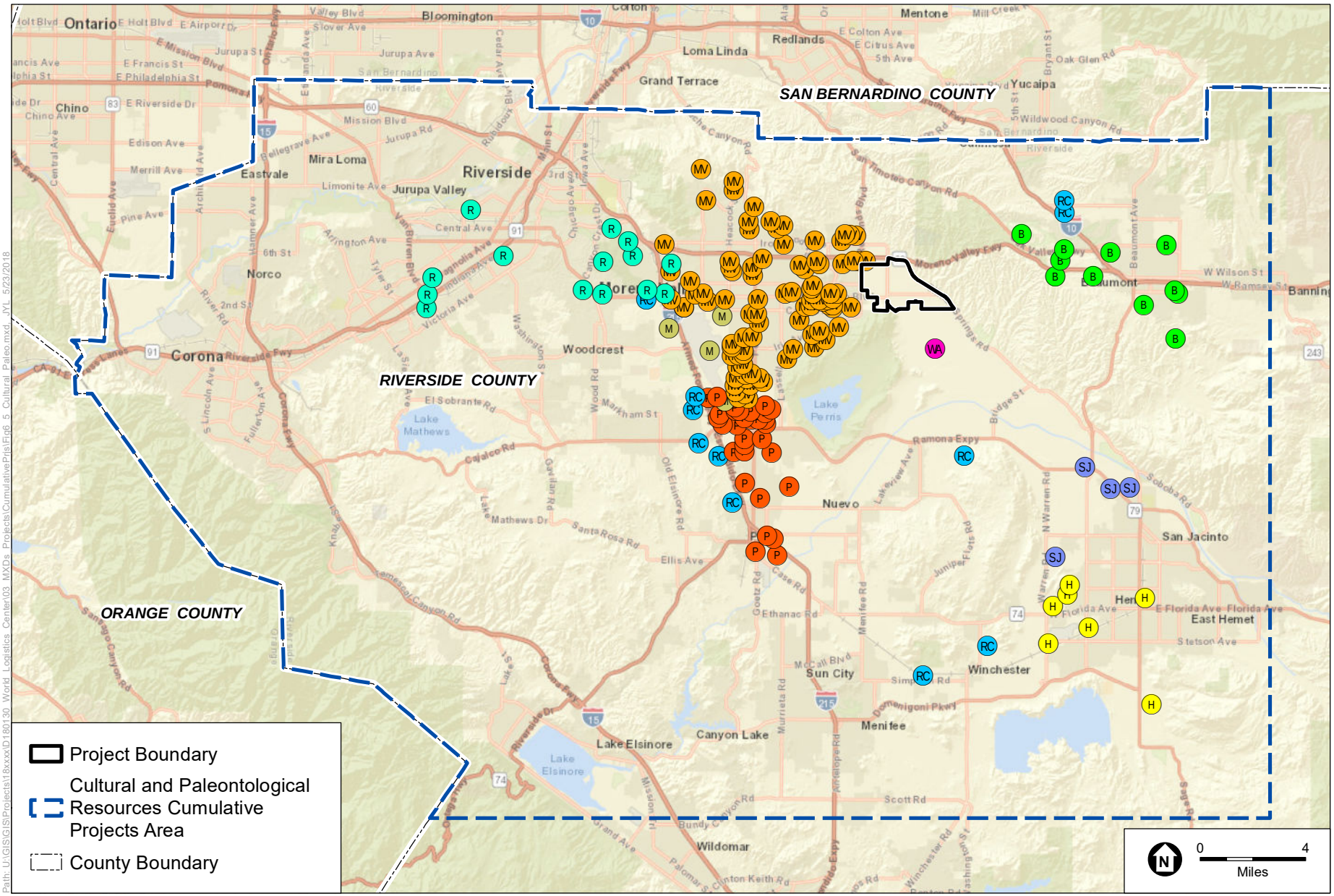
Cumulative Impact Analysis

Cumulative ground disturbance in Western Riverside County could disturb human burials. Potentially cumulative projects such as RC-5, M-2, M-5 and others would be subject to the State laws that protect human remains such as Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Because these State laws have been adopted to protect human remains, compliance with them would assure that cumulative impacts related to the disturbance of human remains would be less than significant. Because there is no evidence of human burials on the project site and ground disturbing activities on the project site would be subject to the State laws cited above, the project's less-than-significant incremental contribution to potential cumulative impacts on human burials would not cause or contribute to a significant cumulative effect.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.5-1

Cultural and Paleontological Resources Cumulative Projects Area

ESA

Table 6.5-1: Cultural and Paleontological Resources Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-2	Tournament Hills 3	No project description available.
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. The project would have a less than significant impact on cultural resources.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. The project would have a less than significant impact on cultural resources.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park. The project would have no impact on cultural resources.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. The project would have no impact on cultural resources.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. The project would have a less than significant impact on cultural resources with mitigation.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. The project would have no impact on cultural resources.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. The project would have a less than significant impact on cultural resources with mitigation.

Project ID	Project Name	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. The project would have a less than significant impact on cultural resources with mitigation.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The project would have a potentially significant impact on cultural resources.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. The project will have a less than significant impact on cultural resources.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. The project would have a less than significant impact on cultural resources with mitigation.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. No information in document related to cultural resources.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. No information in provided documentation on level of impact on cultural resources after mitigation.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMN, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. The project would have a less than significant impact on cultural resources with mitigation.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. No information in provided documentation on impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. The project would have a less than significant impact on cultural resources with mitigation.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR, the project would result in the development of a 130 acre business park. The project would have a less than significant impact on cultural resources with mitigation.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. The project would have a significant impact on cultural resources and result in the demolition of one identified historical feature.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. The project would have a less than significant impact on cultural resources.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. The project would have a less than significant impact on cultural resources.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. No information in provided documentation on level of impact on cultural resources after mitigation.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. The project would have no impact on cultural resources.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. The project would have a less than significant impact on cultural resources.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. The project would have a less than significant impact on cultural resources.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. The project would have a less than significant impact on cultural resources.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. The project would have a less than significant impact on cultural resources.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. The project would have a less than significant impact on cultural resources.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. The project would have a less than significant impact on cultural resources.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. The project would have a less than significant impact on cultural resources.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. The project would have a less than significant impact on cultural resources.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. The project would have a less than significant impact on cultural resources.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. The project would have a less than significant impact on cultural resources.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. The project would have a less than significant impact on cultural resources.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. The project would have a less than significant impact on cultural resources with mitigation.

Project ID	Project Name	Environmental Document Summary
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. The project would have a less than significant impact on cultural resources.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. The project would have a less than significant impact on cultural resources.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. The project would have a less than significant impact on cultural resources.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. The project would have a less than significant impact on cultural resources.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. The project would have a less than significant impact on cultural resources.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. The project would have a less than significant impact on cultural resources.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. The project would have a less than significant impact on cultural resources.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. The project would have a less than significant impact on cultural resources.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. The project would have a less than significant impact on cultural resources.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. The project would have a less than significant impact on cultural resources.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. The project would have a less than significant impact on cultural resources.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project would have a less than significant impact on cultural resources.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project would have a less than significant impact on cultural resources.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. The project would have a less than significant impact on cultural resources with mitigation.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. The project would have a less than significant impact on cultural resources with mitigation.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. The project would have a less than significant impact on cultural resources.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. The project would have a less than significant impact on cultural resources with mitigation.

Project ID	Project Name	Environmental Document Summary
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. The project would have a less than significant impact on cultural resources with mitigation.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. The project would have a less than significant impact on cultural resources with mitigation.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. The project would have a less than significant impact on cultural resources.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. The project would have a less than significant impact on cultural resources.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. The project would have a less than significant impact on cultural resources.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space The project would have a less than significant impact on cultural resources.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. The project would have a less than significant impact on cultural resources.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. The project would have a less than significant impact on cultural resources.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The project would have a less than significant impact on cultural resources.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. The project would have a less than significant impact on cultural resources.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. The project would have a less than significant impact on cultural resources.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. The project would have a less than significant impact on cultural resources.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. The project would have a less than significant impact on cultural resources with mitigation.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. The project would have a less than significant impact on cultural resources.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. The project would have a less than significant impact on cultural resources.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. The project would have a less than significant impact on cultural resources.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. The project would have a less than significant impact on cultural resources.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. The project would have a less than significant impact on cultural resources.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. The project would have a less than significant impact on cultural resources.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. The project would have a less than significant impact on cultural resources.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. The project would have a less than significant impact on cultural resources.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. The project would have a less than significant impact on cultural resources.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. The project would have a less than significant impact on cultural resources.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. The project would have a less than significant impact on cultural resources.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. The project would have a less than significant impact on cultural resources.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. The project would have a less than significant impact on cultural resources.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. The project would have a less than significant impact on cultural resources.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. The project would have a less than significant impact on cultural resources with mitigation.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. The project would have no impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. The project would have a less than significant impact on cultural resources.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. The project would have a less than significant impact on cultural resources.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. The project would have a less than significant impact on cultural resources.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. The project would have a less than significant impact on cultural resources.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. The project would have a less than significant impact on cultural resources.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. Project was exempt from environmental review.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. The project would have a less than significant impact on cultural resources.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. Project was exempt from environmental review.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. Project was exempt from environmental review.

Project ID	Project Name	Environmental Document Summary
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. The project would have a less than significant impact on cultural resources.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. The project would have a less than significant impact on cultural resources.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. The project would have a less than significant impact on cultural resources.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. The project would have a less than significant impact on cultural resources.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. The project would have a less than significant impact on cultural resources.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. The project would have a less than significant impact on cultural resources.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. The project would have a less than significant impact on cultural resources with mitigation incorporated.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. The project would have a less than significant impact on cultural resources.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. The project would have a less than significant impact on cultural resources with mitigation.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. The project would have a less than significant impact on cultural resources with mitigation.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. The project would have a less than significant impact on cultural resources with mitigation.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. The project would have a less than significant impact on cultural resources with mitigation.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. The project would have a less than significant impact on cultural resources.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. The project would have a less than significant impact on cultural resources with mitigation.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. No information in provided document on impact significance after mitigation incorporated.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The project would have a less than significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. The project would have a less than significant impact on cultural resources with mitigation.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. The project would have a less than significant impact on cultural resources.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. The project has mitigation measures in place for cultural resource impacts, no information on if impacts are significant after mitigation implemented.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. The project would have a less than significant impact on cultural resources with mitigation.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. The project would have a less than significant impact on cultural resources.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. The project would have a less than significant impact on cultural resources.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. The project would have a less than significant impact on cultural resources with mitigation.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. The project would have a less than significant impact on cultural resources with mitigation.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. The project would have a potentially significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. The project would have a less than significant impact on cultural resources with mitigation.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. The project would have a less than significant impact on cultural resources with mitigation.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. The project would have a less than significant impact on cultural resources.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. The project would have a less than significant impact on cultural resources.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. The project would have a potentially significant impact on cultural resources.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. The project would have a less than significant impact on cultural resources with mitigation.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. The project would have a less than significant impact on cultural resources with mitigation.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. The project would have a less than significant impact on cultural resources with mitigation.

Project ID	Project Name	Environmental Document Summary
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. The project would have a less than significant impact on cultural resources with mitigation.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. The project would have a less than significant impact on cultural resources with mitigation.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. The project would have a less than significant impact on cultural resources with mitigation.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. The project would have a less than significant impact on cultural resources with mitigation.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. The project would have significant, cumulative impacts on cultural resources.

Project ID	Project Name	Environmental Document Summary
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The project would have less than significant impacts on cultural resources.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. The project would have less than significant impacts on cultural resources.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. The project has mitigation measures in place for cultural resource impacts, no information on if impacts are significant after mitigation implemented.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. The project would have less than significant impacts on cultural resources.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. The project would have no impact on cultural resources.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. The project would have a potentially significant impact on cultural resources.

Project ID	Project Name	Environmental Document Summary
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. The project would have a less than significant impact on cultural resources with mitigation.
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. The project would have a less than significant impact on cultural resources.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. The project would have a less than significant impact on cultural resources.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. The project would have a less than significant impact on cultural resources with mitigation.

6.5.3.2 Archaeological Resources

Impact: *The project contribution to potential cumulative effects on known or previously undetected subsurface archaeological resources would be cumulatively considerable.*

Threshold:	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Cumulative Impact Analysis

Cumulative projects within Western Riverside County such as RC-5, MV-2, MV-4 and M-8 would involve ground disturbance that could result in a significant impact to archaeological resources. Some of the cumulative projects have incorporated project design features to avoid potential effects to known archaeological resources; however, potential significant cumulative impacts could occur to unknown archaeological resources. Although no known resources are located within the project area, ground

disturbing activities could result in a significant impact to unknown archaeological resources. Therefore, the project's contribution to potential significant cumulative impacts would be cumulatively considerable.

Typical mitigation measures implemented by the cumulative projects (such as RC-5, M-2, MV-4 and M-8) to reduce potential impacts to unknown archaeological resources include archeological monitoring, Native American tribal representation during monitoring, and protocols for treatment of discovered resources. These measures typically reduce potential impacts to unknown archaeological resources to less than significant.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.5.6.1A through 4.5.6.1E would be required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the recommended mitigation measures, potential impacts to archaeological resources would be reduced. Mitigation Measures 4.5.6.1A and 4.5.6.1B includes Phase 1 cultural resources assessments of parcels that have not been assessed, significance evaluation of any resources encountered, and development of appropriate treatment or mitigation. Mitigation measures 4.5.6.1C and 4.5.6.1D include the retention of an archaeological monitor to observe all grading activities, with invitation of a Native American tribal representative to participate in monitoring. Mitigation measure 4.5.6.1E includes protocols to be followed should resources be discovered, including resource evaluation and appropriate treatment for significant resources. Through the implementation of the above mitigation measures, the project's incremental contribution to potential significant cumulative impacts would be less than cumulatively considerable.

6.5.3.3 Historic Resources

Impact: *The project contribution to potential cumulative direct and indirect effects on local historical resources would be cumulatively considerable.*

Threshold:	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the State CEQA Guidelines?

Cumulative Impact Analysis

Cumulative related projects within Western Riverside County (such as RC-5, M-2 and M-8) would involve ground disturbance that could impact above-ground structures that are of historic-age and meet the criteria of historic resources. Ground disturbance could also result in impacts to unknown historic resources that are located below ground. The construction activities associated with cumulative development could result in a potential significant cumulative impact.

The implementation of the project would contribute to potential cumulative impacts to historic resources. Because the project includes the removal of seven rural residential structures and associated out-buildings that may be of historic-age, impacts on these structures, features or resources could be significant. In addition, the project also includes effects on other structures of historic-age such as two previously identified historic sites containing farm buildings and related out-buildings as well as Alessandro Boulevard which was constructed across the site in the 1890s. The project's incremental contribution to cumulative historic impacts would be cumulatively considerable.

Typical mitigation measures implemented by projects in the cumulative scenario to reduce potential impacts to historical resources include proper curation and recordation of the recovered historic resources. These measures typically reduce potential impacts to historical resources to less than significant.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.5.6.2A through 4.5.6.2C would be required.

Significance Level After Mitigation: Less than significant impact. With the implementation of the recommended mitigation measures, the project's contribution to historic cumulative impacts would be reduced. The implementation of Mitigation Measure 4.5.6.2A would include the proper curation of recovered historic resources. The implementation of Mitigation Measure 4.5.6.2B would include the installation of a historical marker along a historic trail. Mitigation Measure 4.5.6.2C include an alignment of an onsite road along the historical alignment of Alessandro Boulevard. With the implementation of these mitigation measures, the project's contribution to potentially significant cumulative historic impacts would be less than cumulatively considerable.

6.5.3.4 Paleontological Resources

Impact: *The project's contribution to potential significant cumulative effects on previously undetected subsurface paleontological resources would be cumulatively considerable.*

Threshold:	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Cumulative Impact Analysis

Cumulative projects within Western Riverside County (such as RC-5, M-2 and RC-34) would involve ground disturbance that could cause adverse impacts to paleontological resources. Potential impacts from projects in the cumulative scenario that could impact the same fossil-bearing geologic units as the project would be considered significant. These units include older Pleistocene alluvium and the San Timoteo formation, both of which have been assigned a moderate paleontological sensitivity because they have yielded paleontological resources in the past. Potential impacts from the implementation of projects in the cumulative scenario (such as RC-5, M-2 and RC-34) could result in significant cumulative impacts.

Because the project would result in ground disturbance that could affect paleontological resources within the Pleistocene alluvium and the San Timoteo formation, the project's contribution to cumulative paleontological resources impacts would be cumulatively considerable.

The typical mitigation measures implemented by the cumulative related projects such as RC-5, M-2 and RC-34 to reduce potential impacts to paleontological resources are paleontological monitoring and properly curating resources that are found. These measures typically reduce potential impacts to paleontological resources to less than significant.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.5.6.3A and 4.5.6.3B would be required.

Significance Level After Mitigation: Less than significant impact. The implementation of the above mitigation measures would reduce the project's contribution to potential cumulative impacts to paleontological resources. The implementation of Mitigation Measure 4.5.6.3A includes the presence of a City-approved paleontologist to monitor excavation activities and salvage/collect fossils. Mitigation Measure 4.5.6.3B provides for the paleontological assessment of off-site improvements area and the implementation of monitoring protocols, where appropriate (MM 4.5.6.3B). Through the implementation of these mitigation measures, the project's contribution to potential significant cumulative impacts to paleontological resources would not be cumulatively considerable.

6.6 Geology and Soils

Cumulative effects to geology and soils are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to geology and soils is provided in Section 6.6.1. The geographic and temporal scopes for cumulative impacts to geology and soils are provided in Section 6.6.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the geology and soil issues are discussed in Section 6.6.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.6.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.6-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact to geology and soils. These potentially significant cumulative impacts are documented in the following section.

6.6.1 Project Impact Findings

The project's effects to geology and soils are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project's impacts (see Section 4.6 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? **Less than Significant, Section 4.6.5.1.**
- Result in substantial soil erosion or the loss of topsoil; **Less than Significant, Section 4.6.5.2.**
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **No Impact, Section 4.6.5.3.**
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure. **Less than Significant, Section 4.6.5.4.**
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Maps issued by the State Geologist for the area or based on other

substantial evidence of a known fault; **Less than Significant with Mitigation, Section 4.6.6.1, Impact 4.6.6.1.**

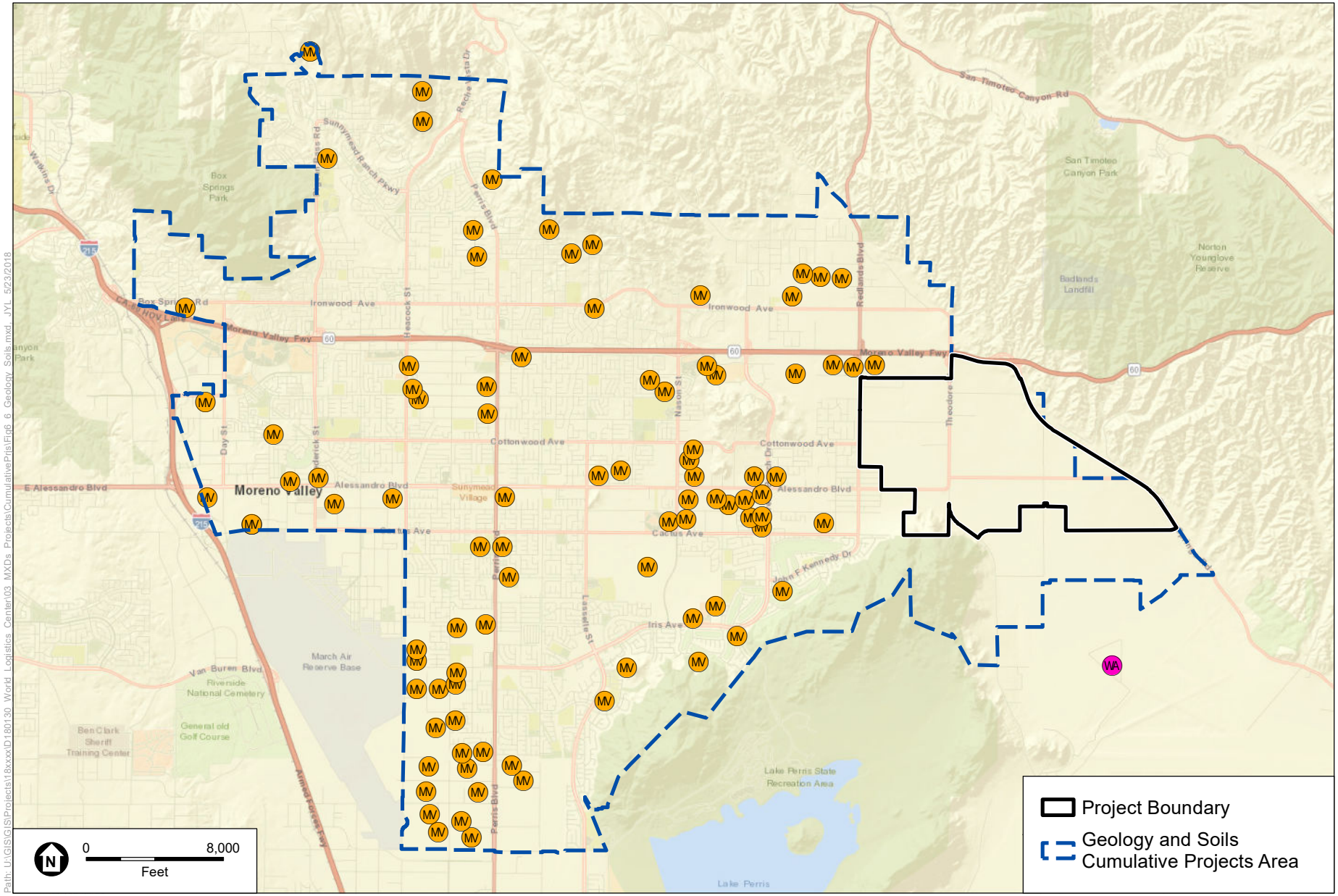
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. **Less than Significant with Mitigation, Section 4.6.6.2, Impact 4.6.6.2.**
- Be located on expansive soil, creating substantial risks to life or property. **Less than Significant with Mitigation, Section 4.6.6.3, Impact 4.6.6.3.**

Pursuant to CEQA Guidelines §15130, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR." Because the project would result in no impact related to the capability of soils to adequately support the use of septic tanks or alternative wastewater disposal systems, it could not cause or contribute to any potential cumulative impact in this respect.

In all remaining respects, the project's impacts would be less than significant or less than significant with mitigation and are evaluated in the cumulative effects analysis below. .

6.6.2 Geographic and Temporal Scope

The geographic area to evaluate potential cumulative impacts to geology and soils is the City of Moreno Valley because the City has adopted specific regulations within their grading regulations and building codes (e.g., City adopted the California Building Code) to reduce potential geology and soils impacts. People and structures within the City are subject to geotechnical and soils issues including faults, seismic ground shaking, liquefaction, landslides, and unstable soils. The geographic area for cumulative geology and soils impacts is shown on Figure 6.6-1. The projects located within the cumulative geology and soil impact area are listed in Table 6.6-1.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.6-1

Geology and Soils Cumulative Projects Area

ESA

Table 6.6-1: Geology and Soils Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is no impact on the geology and soils in the area.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility would contribute to cumulative impacts from fault rupture, ground shaking, ground failure, soil erosion, expansive soils and landslides.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the geology and soils in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the geology and soils in the area.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the geology and soils in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the geology and soils in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the geology and soils in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the geology and soils in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact on the geology and soils in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the geology and soils in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the geology and soils in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact on the geology and soils in the area.
MV-20	Moreno Marketplace	The Project's development of 95,905 square foot retail center would contribute to cumulative impacts from, ground shaking, ground failure, soil erosion, expansive soils and landslides.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact on the geology and soils in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is a less than significant impact on the geology and soils in the area.
MV-24	TM 36436 (PA12-0005)	The Project's subdivision of 43.52 acres into 159 single family residential lots would contribute to cumulative impacts from ground shaking, ground failure, soil erosion, and landslides.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the geology and soils in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the geology and soils in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the geology and soils in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on eh geology and soils in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the geology and soils in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the geology and soils in the area.
MV-34	TR34397 / Winchester Associates	The Project's subdivision of 19 acres into 50 single family residential lots would contribute to cumulative impacts from fault rupture, ground shaking, ground failure, and soil erosion,
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the geology and soils in the area.
MV-36	TM 31618 (PA03-0106)	The Project's subdivision of 18.99 acres into 56 single family residential lots would contribute to cumulative impacts from ground shaking, ground failure, and soil erosion.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the geology and soils in the area with mitigation measures.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the geology and soils in the area with mitigation measures.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact on the geology and soils in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is a less than significant impact on the geology and soils in the area with mitigation measures.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact on the geology and soils in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically mention an impact on the geology and sols in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	The Project's subdivision of a 75.05-acre property into four parcels with business center land uses could contribute to cumulative impacts from fault rupture, ground shaking, ground failure, soil erosion, expansive soils and landslides.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact on the geology and soils in the area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the geology ad soils in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is a less than significant impact on the geology and soils in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is no impact on the geology and soils in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is no impact on the geology and soils in the area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. There is no mention on the impact on geology and soils in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the geology and soils in the area,
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that there is no impact on the environment. It does mention an impact on the geology and soils in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the geology and soils in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the geology and soils in the area.
MV-61	Walmart & Gas Station	The Project's development of a 193,000 square-feet of retail/commercial uses on a 22.28-acre site would contribute to cumulative impacts from fault rupture, ground shaking, ground failure, soil erosion, expansive soils and landslides.

Project ID	Project Name	Environmental Document Summary
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact on the geology and soils in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the geology and soils in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the geology and soils in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is no impact on the geology and soils in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the geology and soils in the area,
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the geology and soils in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the geology and soils in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the geology and soils in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the geology and soils in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact on the geology and soils in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the geology and soils in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the geology and soils in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the geology and soils in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resiolution did state that there was no impact on the environment in the area. It did not specifically mention the impact on the geology and soils.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. It does not specifically mention an impact on the geology and soils in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the geology and soils in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the geology and soils in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the geology and soils in the area.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is a less than significant impact on the geology and soils in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the geology and soils in the area.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the geology and soils in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the geology and soils in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the geology and soils in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is a less than significant impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution stated that there is no impact on the environment in the area. It does not specifically mention whether or not there is an impact on the geology and soils in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the geology and soils in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the geology and soils in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution makes no statements regarding the environment, including the geology and soils, in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the geology and soils in the area with mitigation measures.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the geology and soils in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the geology and soils in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the geology and soils in the area.

Project ID	Project Name	Environmental Document Summary
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is a less than significant impact on the geology and soils in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the geology and soils in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is a potentially significant impact on the geology and soils in the area.

6.6.3 Cumulative Impact Evaluation

6.6.3.1 Landslides and Rockfalls

Impact: *The project would contribute incrementally to a less than significant cumulative impact relating to the exposure of persons or structures to potential substantial adverse landslide or rockfall effects.*

Threshold:	Would the project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Cumulative Impact Analysis

Based on a review of the available environmental documentation for projects in the cumulative scenario (such as MV 4, MV 24 and MV 126), none of the potentially cumulative projects has the potential to cause exposure to landslide or rockfall effects particularly adjacent to foothills and steep slopes. Therefore, there would be no significant cumulative landslides or rockfall effects that could adversely affect people or structures with the implementation of the cumulative scenario.

The project site includes one area that encompasses the lower slopes of Mount Russell. The project designates these slope areas as Open Space, which would reduce the potential for landslide or rockfalls that could adversely affect people or structures. With the application of the Open Space designation to this area, the project would reduce this potential effect to less than significant. Because projects in the cumulative scenario would not expose people or structures to landslides or rockfall impacts, the project's incremental less-than-significant contribution to potential cumulative effects would not alone cause or create a significant cumulative effect relating to the exposure of people and structures to landslide or rockfall impacts. A less than significant cumulative effect would result.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.6.3.2 Soil Erosion or Loss of Topsoil

Impact: *The project would contribute incrementally to a less than significant cumulative impact relating to soil erosion or the loss of topsoil.*

Threshold:	Would the project result in substantial soil erosion or the loss of topsoil?

Cumulative Impact Analysis

Projects in the cumulative scenario have the potential to result in short-term erosion of surface soils; however, as appropriate, the cumulative projects include the implementation of erosion control features that comply with National Pollutant Discharge Elimination System (NPDES) requirements and would reduce erosion to less than significant. In addition, those projects include improvements that would not increase long-term erosion of on-site soils and therefore, would result in less than significant impacts. Following is a further discussion of the potential erosion associated with the cumulative projects.

Prior to moving soils during construction activities, the project proponent of each of the cumulative projects would be required to submit detailed grading plans to obtain grading permits. The approval of the permits would require compliance with applicable standards of the City's Grading Ordinance. Projects that would result in the disturbance of more than one acre of land would be required to obtain a NPDES permit and to comply with SCAQMD Rule 403 (fugitive dust). A Storm Water Pollution Prevention Plan (SWPPP) would also be required to reduce potential erosion and surface water discharge impacts. Based on a review of the environmental documentation prepared for each of the cumulative related projects, the SWPPP would include specific erosion control features to reduce potential soil erosion to less than significant. Therefore, the cumulative related projects would result in less than significant impacts associated with soil erosion or the loss of topsoil. The implementation of the proposed project includes specific components to reduce potential impacts of soil erosion or loss of topsoil during construction activities. These components are identified in Section 4.6.5.2 of the FEIR. With the implementation of these construction measures/components, the project would result in a less than significant soil erosion or loss of topsoil impact. In assessing the cumulative projects in conjunction with the project, the implementation of erosion control features that would be required to obtain grading permits would reduce the cumulative soil erosion or loss of topsoil impact to less than significant. Further, the project's incremental less-than-significant contribution to potential cumulative impacts associated with soil erosion or the loss of topsoil alone would not cause one. Thus, cumulative erosion and topsoil impacts would be less than significant during construction.

Long-term operations of projects in the cumulative scenario have the potential to cause soil erosion or loss of topsoil if soil stabilization measures are not incorporated into ongoing operations. However, based on review of the environmental documentation for the cumulative related projects, each project identifies that the implementation of the urban uses on the project site would result in less than significant soil erosion impacts or each project would incorporate soil stabilization measures to reduce soil erosion impacts to less than significant. In assessing the cumulative related projects in conjunction with the project, the implementation of soil stabilization measures for those projects that require those measures such as the project, the potential cumulative long-term soil erosion impact would be less than significant. Because the project includes various detention/retention, treatment and soil stabilization measures to reduce potential long-term soil erosion or the loss of topsoil with the measures identified in Section 4.6.5.2 of the FEIR, the project would not cause a significant cumulative impact. Thus, cumulative erosion and topsoil impacts would be less than significant during operation.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.6.3.3 Seismic-Related Ground Failure

Impact: *The project would contribute incrementally to a less than significant cumulative impact relating to the considerable exposure of people or structures to potential adverse seismic ground failure effects.*

Threshold:	Would the project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic ground failure?

Cumulative Impact Analysis

Persons or structures associated with projects in the cumulative scenario could be exposed to geologic conditions that cause ground failure during seismic events (including all "MV" cumulative projects). These potential geologic conditions include landslides, settlement, subsidence, or liquefaction, and potential ground failure that could expose people or structures to these effects. The exposure to these impacts could result in significant impacts; however, each of the cumulative projects would be subject to the City of Moreno Valley's grading requirements and building codes. Compliance with these requirements would reduce potential effects to less than significant.

The project site is located in an area of the City that is not subject to settlement, subsidence or liquefaction. In addition, the majority of the project site lies on relatively flat terrain. There is one portion of the site that includes steep topographic features that could be subject to landslides; however, the project designates this area for Open Space (Planning Area 30). In considering the implementation of the project in combination with the cumulative related projects, no significant cumulative effect of exposing persons and structures to potential seismic ground failure would result.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significant Level After Mitigation: Less than significant impact.

6.6.3.5 Fault Rupture

Impact: *The project would cause a cumulatively considerable contribution to a significant cumulative effect relating to the exposure of people or structures to potential adverse fault rupture effects.*

Threshold:	Would the project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Maps issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Cumulative Impact Analysis

The San Jacinto Fault Zone and its associated fault segments are located within the eastern portion of the City of Moreno Valley. According to the City of Moreno Valley General Plan EIR, no other active fault zone is located within the City. Based on a review of projects in the cumulative scenario, San Jacinto Wildlife Area Land Management Plan is the only related project that is located in the immediate

vicinity of the San Jacinto Fault Zone. A portion of the Land Management Plan encompasses the area immediately south of the project site and is located within the City of Moreno Valley. This portion of the Land Management Plan includes a potential for a water storage project that would involve construction of enclosed berms to hold water and an onsite pipeline. However, based on information from the San Jacinto Wildlife Area Land Management Plan EIR, the water storage project would not be located on any of the mapped earthquake fault zones and would thus be unlikely subject to fault rupture. Therefore, no significant cumulative effect would result relating to surface rupture impacts exposing persons and structures to significant effects.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.6.6.1A through 4.6.6.1C is required.

Significance Level After Mitigation: Less than significant impact. The implementation of Mitigation Measures 4.6.6.1A through 4.6.6.1C will require subsurface evaluations to determine the implementation of structural setbacks, remedial earthwork and/or foundation recommendations if site-specific geotechnical investigations confirm the locations of the fault alignments in the areas of proposed land uses. The implementation of these mitigation measures would reduce the project's potential fault rupture impacts to less than cumulatively considerable.

6.6.3.6 Ground Shaking

Impact: *The project would result in a cumulatively considerable exposure of people or structures to potential strong seismic ground shaking.*

Threshold:	Would the project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong ground shaking?

Cumulative Impact Analysis

Projects in the cumulative scenario could be subject to ground shaking resulting from seismic activity on regional and local faults (including all "MV" cumulative projects). The level of potential ground motion from faults is considered moderate to high in the City of Moreno Valley. Based on a review of the environmental documents prepared for the cumulative projects (such as MV-34, MV-36, MV-41 and MV-48), the structures proposed by each project would be required to be designed in accordance with the California Building Code and the City of Moreno Valley Building Code to preclude adverse effects to the structures and persons associated with strong seismic ground-shaking. The amount of ground shaking would be dependent on the earthquake size, location and distance. Ground shaking would be greater with larger and closer earthquakes. Cumulative projects could expose persons and structures to significant cumulative seismic ground shaking impacts.

The implementation of the project could also subject persons and structures to ground shaking from seismic activity on regional and local faults. Section 4.6 identifies that the exposure of the proposed structures and persons to seismic activity would be significant. Therefore, the combination of impacts of the project and other projects in the cumulative scenario would result in a cumulative significant impact. Given the size of the project and the number of people and scope of structures it would include, the project's contribution to the significant cumulative impact associated with exposing persons and structures to strong seismic ground shaking impacts would be cumulatively considerable.

Significance Level Before Mitigation: Potential significant impact.

Mitigation Measures: Implementation of Mitigation Measure 4.6.6.2A would be required.

Significance Level After Mitigation: Less than significant impact. With the implementation of Mitigation Measure 4.6.6.2A, structural design parameters for the proposed improvements in accordance with the California Building Code, including applicable City amendments, would be

implemented based on site-specific geotechnical investigations. The implementation of this measure would reduce the project's contribution to the potential significant cumulative exposure of persons and structures to seismic ground shaking impacts to less than cumulatively considerable.

6.6.3.7 Unstable Soils

Impact: *The project would result in a cumulatively considerable expansive soil impact that could create substantial risks to life or property.*

Threshold:	Would the project be located on expansive soil, creating substantial risks to life or property?

Cumulative Impact Analysis

Projects in the cumulative scenario (such as MV-20, MV-41, and MV-61) would include structural development on soils that have a low to moderate shrink/swell potential that could result in unstable soils. Areas where soils have a moderate shrink/swell potential could result in expansive soil impacts that would be significant. However, based on a review of the cumulative projects such as MV-20, MV-41 and MV-61, the implementation of special construction techniques and compliance with the California Building Code would reduce expansive soil impacts to less than significant.

The implementation of the project could include structures on soils with moderate shrink/swell and cause potential significant impacts to persons and structures Therefore, the combination of the project's incremental impacts together with the impacts of other projects in the cumulative scenario would result in a cumulative significant expansive soil impact. Given the size of the project and the number of people it would include, the project's contribution to exposing persons and structures to expansive soil impacts would be cumulatively considerable.

Significance Level Before Mitigation: Potential significant impact.

Mitigation Measures: Implementation of Mitigation Measures 4.6.6.3A through 4.6.6.3C would be required.

Significance Level After Mitigation: Less than significant impact. With the implementation of Mitigation Measures 4.6.6.3A through 4.6.6.3C, structural design parameters for the proposed improvements in accordance with the California Building Code, including applicable City amendments, would be implemented based on site-specific geotechnical investigations. The implementation of these measures would reduce the project's contribution to the potential significant cumulative exposure of persons and structures to expansive soil impacts to less than cumulatively considerable.

6.7 Greenhouse Gas Emissions, Climate Change and Sustainability

Cumulative effects to greenhouse gas (GHG) emissions, climate change and sustainability are described in this section. A summary of the project's potential impacts related to GHG emissions and consistency with plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs is provided in Section 6.7.1. The cumulative impact geographic area for GHG emissions, climate change, and sustainability issues is provided in Section 6.7.2. The potential cumulative impacts and the project's contribution to cumulative impacts related to GHG emissions and consistency with plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs are discussed in Section 6.7.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.7.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the city will fully build out by 2040, the cumulative impact analysis assumes worse case cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.7-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they would contribute to a cumulatively considerable impact to greenhouse gas emissions, climate change and sustainability. These potentially cumulative impacts are documented in the following section.

6.7.1 Project Impact Findings

The project's effects on greenhouse gas emissions, climate change, and sustainability are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.7 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (i.e., exceeds the SCAQMD's 10,000 mt CO_2e emissions screening threshold of significance); **Less than Significant with Mitigation, Section 4.7.6.1.**
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. **Less than Significant with Mitigation, Section 4.7.6.2.**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to greenhouse gas emissions identified in the revised FEIR.

6.7.2 Geographic and Temporal Scope

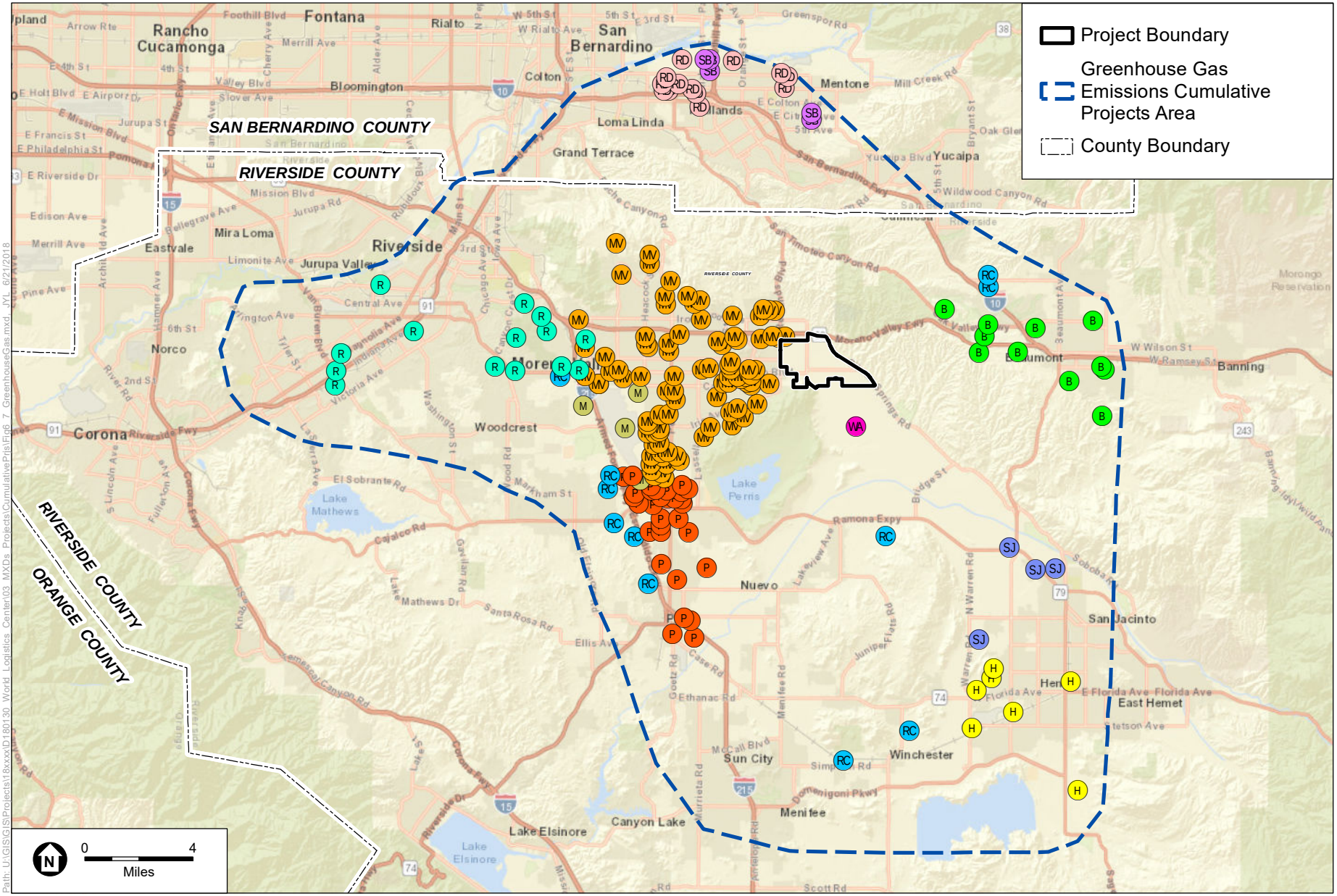
CEQA requires that lead agencies consider the cumulative impacts of GHG emissions from even relatively small (on a global basis) increases in GHG emissions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and therefore significant. In the case of global climate change, the proximity of the project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. GHG emission impacts are, by their very nature cumulative, as both the California Natural Resources Agency and CAPCOA have recognized.

For purposes of this analysis, the cumulative impact geographic area for GHG emissions is based on the limits set forth in the cumulative traffic analysis conducted by the project. This area includes the entire City of Moreno Valley and portions of the Cities of Riverside, Redlands, Beaumont, Perris, San Jacinto, Hemet and Calimesa, as well as portions of unincorporated Riverside and San Bernardino County, and the March JPA. The primary sources of GHG emissions from this project would be related to energy consumption in buildings and related uses (lighting for streets and parking lots, etc.) and in the transport of goods by future tenants. Regulations applicable to the GHG-intensity of power and petroleum production in California are promulgated at the state level. Regulations, policies, and plans to reduce GHGs potentially applicable to the project are adopted by the State of California, regional governmental agencies (such as SCAG and SCAQMD), and local governments, in support of State laws AB32 and SB32.

As part of the GHG cumulative analysis a review of available environmental documents for projects within the Project vicinity was conducted. Approximately 360 projects have been identified and out of those 360 projects, approximately 162 environmental documents were available. All 162 were reviewed to identify project specific GHG analyses. Out of the 162 environmental documents that were reviewed, 84 were completed in 2008 or earlier, prior to the requirements of AB32 and the mandatory reporting rules for significant sources of GHG emissions. Therefore, those 84 documents did not provide GHG analyses. Out of the 78 documents that were completed after the year 2008, 24 environmental documents provided a GHG analysis. Despite not having a GHG analysis from all 360 cumulative projects, a determination on the project's cumulative impact could still be determined based on the AQMD's strategies in assessing a cumulatively considerable impact, where projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable.[1]

The projects located within the cumulative GHG emissions, climate change and sustainability impact area are shown in Figure 6.7-1 and listed in Table 6.7-1.

[1] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution, White Paper, Appendix D, 1993, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4. Accessed July 2017.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.7-1

Greenhouse Gas Emissions Cumulative Projects Area

ESA

Table 6.7-1: Greenhouse Gas Emissions, Climate Change and Sustainability Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. The project would have a significant impact on GHG emissions.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. The project would have a significant impact on GHG emissions.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park. The project would have no significant impacts on GHG emissions.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. The project would have a significant impact on GHG emissions.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. The project would have a less than significant impact on GHG emissions.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. The project would have a less than significant impact on GHG emissions.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. The project would have a less than significant impact on GHG emissions.

Project ID	Project Name	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. The project would have a less than significant impact on GHG emissions.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The project would have no impact on GHG emissions.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. The project would have a less than significant impact on GHG emissions.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. The project would have a potentially significant impact on air quality.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. The EIR provides no information on GHG.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. The project would have a less than significant impact on GHG emissions with mitigation incorporated.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. The project would have a less than significant impact on GHG emissions.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The project would have a less than significant impact on GHG emissions.

Project ID	Project Name	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. The project would have a less than significant impact on GHG emissions.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR, the project would result in the development of a 130 acre business park. The project would have significant impacts on GHG emissions associated with consistency with the SCAG RTP/SCS and SB 375.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. The project would have a less than significant impact on GHG emissions.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. The project would have a less than significant impact on GHG emissions.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. The project would have a less than significant impact on GHG emissions.
MV-3	ProLogis	E Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a less than significant impact on the GHG in the area with mitigation measures.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. There is a less than significant impact on the GHG in the area.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the GHG in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the GHG in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the GHG in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the GHG in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the GHG in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact on the GHG in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the GHG in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the GHG in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the GHG in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is a less than significant impact on the GHG in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the GHG in the area.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is a less than significant impact on the GHG in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant impact on the GHG in the area.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the GHG in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the GHG in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the GHG in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the GHG in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on the GHG in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is a less than significant impact on the GHG in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the GHG in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact on the GHG in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the GHG in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the GHG in the area with mitigation measures.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the GHG in the area with mitigation measures.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is a significant and unavoidable impact on the GHG in the area.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is a significant and unavoidable impact on the GHG in the area.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is a less than significant impact on the GHG in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is a significant and unavoidable impact on the GHG in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically mention an impact on the GHG in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is a less than significant impact on the GHG in the area with mitigation measures.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is no impact on the GHG in the area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the GHG in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the GHG in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is no impact on the GHG in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is a less than significant impact on the GHG in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is significant and unavoidable impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. It does not specifically mention an impact on the GHG in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the GHG in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that there will be no impact on the environment in the area. It does not specifically mention an impact on the GHG in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the GHG in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the GHG in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is a less than significant impact on the GHG in the area with mitigation measures.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact on the GHG in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the GHG in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the GHG in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is no impact on the GHG in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the GHG in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is a less than significant impact on the GHG in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the GHG in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the GHG in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant impact on the GHG in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact on the GHG in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the GHG in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the GHG in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the GHG in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. It does not specifically mention an impact on the GHG in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the GHG in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the GHG in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is a less than significant impact on the GHG in the area.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the GHG in the area.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is no impact on the GHG in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the GHG in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the GHG in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the GHG in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is no impact on the GHG in the area.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution states that the project would be exempt from CEQA guidelines. It does not mention specifically anything about an impact on the GHG in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the GHG in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the GHG in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution states that the project is exempt from CEQA guidelines. It does not specifically mention an impact on the GHG in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the GHG in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the GHG in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the GHG in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the GHG in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the GHG in the area.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. The project would have a less than significant impact on GHG emissions.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. The project would have less than significant impacts on GHG emissions.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. The project would have less than significant impacts on GHG emissions.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. The project would have less than significant impacts on GHG emissions with mitigation.

Project ID	Project Name	Environmental Document Summary
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. The project would have less than significant impacts on GHG emissions.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. The project would have a potentially significant impact on air quality.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. The project would have a significant impact on GHG emissions.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. The project would have a less than significant impact on GHG emissions.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. The project would have cumulatively significant impacts to GHG emissions.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. The project would have a significant impact on GHG emissions.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The project would have a potentially significant impact on GHG emissions.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. The project would have a significant impact on GHG emissions.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. The project would have a significant impact on GHG emissions.

Project ID	Project Name	Environmental Document Summary
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. The project would have a less than significant impact on GHG emissions with mitigation.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. The project would have a less than significant impact on GHG emissions.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. The project would have a less than significant impact on GHG emissions. The project would have a less than significant impact on GHG emissions.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. The project would have a less than significant impact on GHG emissions.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. The project would have a significant impact on GHG emissions.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. The project would have a less than significant impact on GHG emissions.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. The project would have a potentially significant impact on GHG emissions.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. The project would have a significant impact on GHG emissions.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. The project would have a significant impact on GHG emissions.

Project ID	Project Name	Environmental Document Summary
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. There is a less than significant impact on the GHG in the area.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. There is a less than significant impact on the GHG in the area with mitigation measures.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. There is a potentially significant impact on the GHG in the area.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. There is a less than significant impact on the GHG in the area.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. There is a less than significant impact on the GHG in the area.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. The project would have a less than significant impact on GHG emissions.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. There is a less than significant impact on the GHG in the area with mitigation measures.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. There is no impact on the GHG in the area.
R-3	P07-1028, -0102; and P09-0416, -0418, -0419	Per the City of Riverside's December 2009 Final EIR, the project would develop a 36.91 acre business park development for light industrial, warehouse distribution, and office uses on 80.07 acres. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. There is a less than significant impact on the GHG in the area.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. There is a less than significant impact on the GHG in the area with mitigation measures.
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area. There is a major impact on the Air emissions/quality. It does not specifically mention an impact on the GHG in the area.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. There is a significant and unavoidable impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The slides do not specifically mention an impact from the GHG in the area. However, it is important to note that GHG is excluded from the slide titled: “Significant Impacts not mitigated”.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. There is no impact on the GHG in the area.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. There is no impact on the GHG in the area.
RC-12	Cores Industrial Partners	Per Riverside County’s October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. There is no impact on the GHG in the area.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. There is no impact on the GHG in the area.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. There is a potentially significant impact on the GHG in the area.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. There is no impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. There is a less than significant impact on the GHG in the area with mitigation measures.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. There is a less than significant impact on the GHG in the area with mitigation measures.
RD-1	Tract 18988	Per the City of Redlands' June 2015 MND, the project would widen Pioneer Avenue to preserve existing deodar cedar trees along an approximately 1,100 linear foot segment between Texas Street and Furlow Drive. The project also would develop 82 single-family residential lots on 30.51 acres. There is no impact on the GHG in the area.
RD-3	Newland Homes Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the construction of 105 single family detached dwelling units and a neighborhood park on 39.84 acres. There is a less than significant impact on the GHG in the area.
RD-4	Redlands Pennsylvania Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the subdivision of a 24.87 acre project site into 67 residential lots and 10 lots as open space. Additionally, the Project seeks approval to remove 5 acres from an Agricultural Preserve. There is a less than significant on the GHG in the area.
RD-6	Woodsprings Hotel	Per the City of Redlands' March 2018 IS, the Project would result in the construction of a 124-room hotel on a 2.68-acre property. There is a less than significant impact on the GHG in the area.
RD-10	Park Ave Industrial Center	Per the City of Redlands' March 2014 MND, the project would develop approximately 170,000 square feet of light industrial uses, including 289 parking spaces and 12, 500 square feet of office space. There is a less than significant impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
RD-11	Marriott Springhill Suites	Per the August 2016 technical memorandum regarding the Trip Generation, Distribution, and Assignment Analysis for the project, the project would develop a four-story 88-room hotel with rooms, suites, and 97 parking spaces. There is a significant cumulative impact on the GHG in the area.
RD-12	I-10 Redlands LC - B	Per the August 2014 letter responding to comments on the proposed MND, the project would develop approximately 1.1 million square feet for warehousing/ fulfillment/distribution center uses on 50.67 acres. There is a less than significant impact on the GHG in the area.
RD-14	Redlands DC 772,000 SF (2015)	Per the City of Redlands' September 2013 MND, the project would develop 771,839 square feet of warehouse distribution center on 35.59 acres and related parking. There is a less than significant impact on GHG in the area.
RD-16	APL Logistics	Per the May 2012 City of Redlands Commission Review and Approval No. 873, the project would develop 809,338 square feet of warehouse uses on 37.4 acres. There is a less than significant impact on the GHG in the area.
SB-1	Redlands Gateway Logistics - B	Per the County of San Bernardino's 2009 IS, the project would result in the construction of 5 two-story structures and 7 single-story structures with a maximum floor area of 216,500 square feet, and a three-story hotel with 180 rooms and a floor area of 80,000 square feet. There is a less than significant impact on the GHG in the area.
SB-2	Redlands Gateway Logistics - A	Per the County of San Bernardino's 2014 IS, the project proposes to subdivide 42.66 acres into 2 lots. Parcel 1 is 14.81 acres and Parcel 2 is 27.85. There is a less than significant impact on the GHG in the area.
SB-3	Prologis #12	Per the County of San Bernardino's 2013 IS, the project would result in a conditional use permit to establish a 593,916 square-foot industrial building to be use as a "high cube" warehouse distribution facility, a tentative parcel map for a one lot subdivision, and a general plan amendment to change the official land use district from East Valley/General commercial to East Valley/regional industrial on 27.42 acres. There is a less than significant impact on the GHG in the area.
SB-4	Prologis #17	Per the County of San Bernardino's April 2014 MND, the Project would result in the construction of a 777,620 square foot industrial building and the relocation of an existing telecommunication tower on a 35.98 acre site. There is a less than significant impact on the GHG in the area.

Project ID	Project Name	Environmental Document Summary
SB-6	Prologis #8	Per the County of San Bernardino's 2007 IS, the project would result in the construction four industrial buildings to be used a "High Cube" and general warehouse distribution facilities. There is a less than significant impact on the GHG in the area.
SB-7	Sam Redlands Tract	Per the City of Redlands' March 2017 ISMND, the Project would result in the subdivision of an 11.97 acre site into 34 single family residential lots, 4 lettered lots, and the demolition of existing structures. There is a less than significant impact on the GHG in the area.
SB-8	Jacinto Tract	Per the City of Redlands' July 2016 ISMND, the Project would result in the subdivision of an 18.54 acre site into 40 residential lots. There is a less than significant impact on the GHG in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is a less than significant impact on the GHG in the area.

6.7.3 Cumulative Evaluation

Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis of project GHG emissions and climate change is based on methodologies and information available at the time this EIR was prepared. While information is presented below to assist the public and the City's decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the City is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

6.7.3.1 Greenhouse Gas Emissions

Impact: *The project's contribution to the generation of cumulative greenhouse gas emissions would not be cumulatively considerable.*

Threshold:	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Cumulative Impact Analysis

The project would emit GHGs mainly from direct sources such as combustion of fuels from worker vehicles and construction equipment. Section 4.7.6.1 Greenhouse Gas Emissions, found that construction of the project would contribute approximately from 11,738 metric tons of CO_2e in its first

year of construction and up to approximately 20,659 mt CO_2e per year of construction during the 16-year construction period. Over the 16-year construction period the project would emit a total of 221,381 mt CO_2e. The SCAQMD recommends that construction emissions be averaged over a 30-year period. Average over a 30-year period results in approximately 7,379 mt CO_2e.

Operational or long-term emissions occur over the life of the project. Mobile emissions were calculated using emission factors for the actual year assessed. The motor vehicle and truck emissions for Phase 1 (2018 to 2025) use emission factors for the year 2025, whereas motor vehicle and truck emissions for Phase 2 (2026 to buildout, 2040) use emission factors for the year 2040. CARB has designed a California cap-and-trade program that is enforceable and meets the requirements of AB 32 and SB 32. The program began on January 1, 2012, placing GHG emissions limits on capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 MT CO2e per year), and enforcing compliance obligations beginning with 2013 emissions. Vehicle fuels were placed under the cap in 2015, and with the passage of AB 398, the program was extended through 2030. The Cap-and-Trade Program allocates emissions permits across covered entities in each sector. As shown in Section 4.7.6.1 Greenhouse Gas Emissions, the project's unmitigated uncapped emissions of approximately 22,854 mt CO_2e per year are over the SCAQMD's significance threshold of 10,000 mt CO_2e per year.

Out of the 24 environmental documents that evaluated GHG emissions, eight (8) documents provided quantitative operation and construction emissions and utilized the SCAQMD's Interim CEQA GHG Significance Thresholds to determine the respective project's level of significance. All eight (8) of the projects that were identified were either residential or commercial projects; therefore, Tier 3 of the SCAQMD's draft threshold for residential/commercial projects, 3,000 mt CO_2e per year, was used in each of the greenhouse assessments. All eight (8) projects that provided quantitative emissions were found to be less than significant and no cumulative impacts would be generated. Furthermore, the additional 16 projects that provided a qualitative GHG analysis were found to be less than significant and not contribute to a cumulative impact. However, although these 24 projects had less than significant impacts, the geographic cumulative area includes 360 projects, all of which could contribute to a significant cumulative impact. Given that the project would have a potentially significant impact to GHG emissions prior to the application of mitigation, this project's contribution to cumulative impact sis considered to be considerable prior to mitigation.

Significance Level Before Mitigation: Cumulatively considerable significant impact.

Mitigation Measures: As identified in Section 4.7.6.1, **Mitigation Measures 4.7.6.1A** is required to reduce solid waste and greenhouse gas emissions from construction and operation of project development.

Significance Level After Mitigation: Less than significant impact. The project's mitigated uncapped emissions of 8,013 mt CO_2e per year would not exceed the SCAQMD's significance threshold of 10,000 mt CO_2e per year. When considered with the other projects' less than significant impacts, the project would not contribute to a significant cumulative impact.

6.7.3.2 Greenhouse Gas Plan, Policy, Regulation Consistency

Impact: *The project, together with cumulative projects, would not cumulatively contribute to conflicts with applicable plans, policies and regulations to reduce greenhouse gas emissions. The project would not be cumulatively considerable.*

Threshold:	Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Cumulative Impact Analysis

Section 4.7.6.2 Greenhouse Gas Plan, Policy, Regulation Consistency, assesses the project's consistency with applicable federal, state, regional, and local GHG reduction strategies. The project would comply with all mandatory reduction strategies such as water conservation, energy efficiency, solid waste reduction, and efficiency measures related to transportation and motor vehicles. In addition, the project would go beyond energy conservation measures and exceed minimal compliance with 2016 Title 24 requirements by approximately 16 percent at full buildout.

Although all cumulative projects are required to comply with mandatory federal, state, regional, and applicable local GHG reduction measures, it would be speculative to assume that all cumulative projects would be consistent with all applicable plans, policies, and regulations related to the reduction of GHG emissions. However, as discussed in Section 4.7.6.2, the project would comply with and would not conflict with applicable GHG reduction measures. Additionally, the project would contribute to further reductions by exceeding minimum compliance with Title 24 requirements by approximately 16 percent at full buildout, incorporating an alternative fuel service station, and supporting infrastructure to accommodate future electric vehicle populations. Therefore, the project's contribution to cumulative impacts would not be cumulatively considerable.

Significance Level Before Mitigation: Cumulatively considerable significant impact.

Mitigation Measures: Implementation of previously referenced **Mitigation Measures 4.3.6.2A, 4.3.6.3B, 4.3.6.4A, 4.3.6.3C, 4.3.6.3D, 4.7.6.1A, 4.7.6.1B, 4.7.6.1C**, **4.7.6.1D, 4.16.1.6.1A, 4.16.1.6.1B,** and **4.16.1.6.1C** will help reduce project-related GHG emissions and therefore make it more consistent with GHG reduction plans, policies, and/or regulations.

Significance Level After Mitigation: Less than significant impact. The 24 environmental documents that evaluated GHG emissions found that their respective projects would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and were found to be less than significant. Because the project's impact would be less than significant with mitigation, and the other projects' impacts were found to be less than significant, the project is not considered to be cumulatively considerable.

6.8 Hazards and Hazardous Materials

Cumulative effects to hazards and hazardous materials are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to hazards and hazardous materials is provided in Section 6.8.1. The geographic and temporal scopes for cumulative impacts to hazards and hazardous materials is provided in Section 6.8.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the hazards and hazardous materials issues are discussed in Section 6.8.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.8.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.8-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact to hazards and hazardous materials.

6.8.1 Project Impact Findings

The project's effects to hazards and hazardous materials are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project's impacts (see Section 4.8 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area; **No Impact, Section 4.8.5.1.**
- For a project located within the vicinity of a private airstrip, result in a safety hazard for people working in the project area; **No Impact, Section 4.8.5.1.**
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; **Less than Significant, Section 4.8.5.2.**
- Create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials; **Less than Significant, Section 4.8.5.3.**
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions; **Less than Significant, Section 4.8.5.3.**

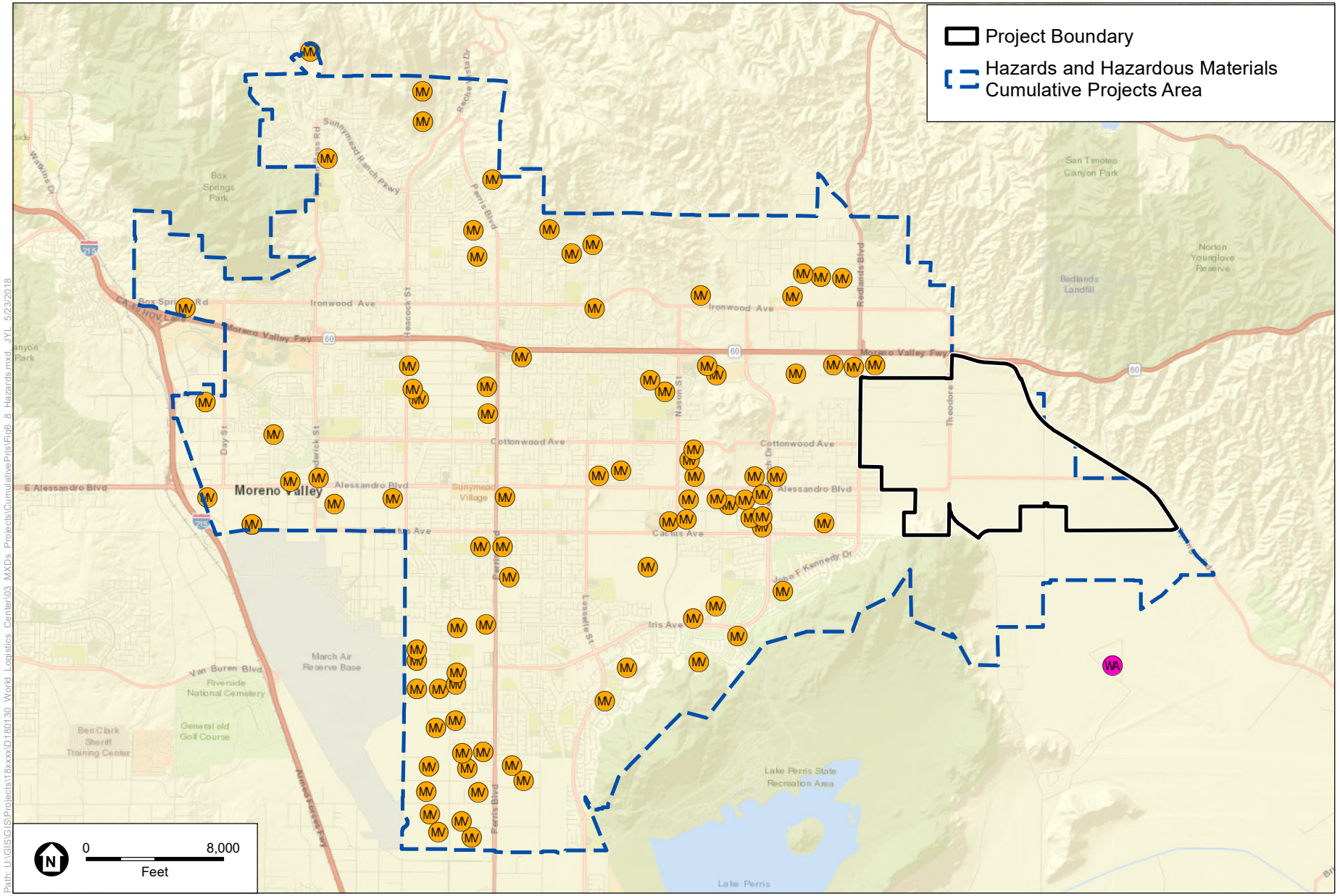
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; **Less than Significant, Section 4.8.5.4.**
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation; **Less than Significant, Section 4.8.5.5.**
- Result in the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. **Less than Significant, Section 4.8.5.6.**
- Create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials; **Less than Significant with Mitigation, Section 4.8.6.1, Impacts 4.8.6.1A and 4.8.6.1B.**

Pursuant to CEQA Guidelines §15130, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR." Because the project would result in no impact related to an airport land use plan or people living or working near a public airport, public use airport, or a private airstrip, it could not cause or contribute to any potential cumulative impact in any of these respects.

Because development of the project could result in a less-than-significant impact related to the remaining considerations, the analysis below evaluates whether impacts of the project could combine with the incremental impacts of other projects in the cumulative scenario to cause or contribute to a significant cumulative effect and, if so, whether the project's contribution would be cumulatively considerable.

6.8.2 Geographic and Temporal Scope

The cumulative impact geographic area for hazards and hazardous materials is the City of Moreno Valley because the City has adopted specific safety policies and regulations to reduce potential hazards and hazardous materials impacts. In addition, the geographic area for potential cumulative effects from the routine transport of hazardous materials is also the City of Moreno Valley because the hazardous materials would be transferred by trucks along major roadways and freeways (particularly SR-60) adjacent to land uses within the City of Moreno Valley. Cumulative impacts related to hazards and hazardous materials could result from the project in conjunction with other past, present and future projects located within the City of Moreno Valley. The geographic area for cumulative hazards and hazardous materials impacts is shown on Figure 6.8-1. The projects located within the cumulative hazards and hazardous materials impact area are listed in Table 6.8-1. The project would contribute to cumulative hazards and hazardous materials conditions starting with the transportation to the project site of project-related hazardous materials and lasting for the duration of onsite construction work and the operation of the project.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.8-1

Hazards and Hazardous Materials Cumulative Projects Area

ESA

Table 6.8-1: Hazards and Hazardous Material Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility would contribute to cumulative impacts from the transport of hazardous materials within the geographic area.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact from the hazards and hazardous materials in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact from the hazards and hazardous materials in the area.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact from the hazards and hazardous materials in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact from the hazards and hazardous materials in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact from the hazards and hazardous materials in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact from the hazards and hazardous materials in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact from the hazards and hazardous materials in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact from the hazards and hazardous materials in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact from the hazards an hazardous materials in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact from the hazards and hazardous materials in the area.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact from the hazards and hazardous materials in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact from the hazards and hazardous materials in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact from the hazards and hazardous materials in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact from the hazards and hazardous materials in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact from the hazards and hazardous materials in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact from the hazards and hazardous materials in the area.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is a less than significant impact from the hazards and hazardous materials in the area with mitigation measures.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact from the hazards and hazardous materials in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is no impact from the hazards and hazardous materials in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact from the hazards and hazardous materials in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. It does mention an impact from the hazards and hazardous materials in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	The Project's subdivision of a 75.05-acre property into four parcels with business center land uses would contribute to cumulative impacts from the transport of hazardous materials within the geographic area.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact from the hazards and hazardous materials in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no new impact from the hazards and hazardous materials in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. It does specifically mention an impact from the hazards and hazardous materials in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact from the hazards and hazardous materials in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that there will be no impact on the environment. It did not specifically mention the impact from hazards and hazardous material in the area.

Project ID	Project Name	Environmental Document Summary
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact from the hazards and hazardous materials in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact from the hazards and hazardous materials in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is no impact from the hazards and hazardous materials in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact from the hazards and hazardous materials in the area.
MV-69	PA07-0039, (Industrial Area SP)	N Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact from the hazards and hazardous materials in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact from the hazards and hazardous materials in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant impact from the hazards and hazardous materials in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact from the hazards and hazardous materials in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact from the hazards and hazardous materials in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact from the hazards and hazardous materials in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact from the hazards and hazardous materials in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resolution does state that there will be no impact on the environment in the area. It does not specifically mention an impact from the hazards and hazardous materials in the area.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. It does not specifically mention an impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact from the hazards and hazardous materials in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact from the hazards and hazardous materials in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is a less than significant impact from the hazards and hazardous material in the area with mitigation measures.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is no impact from the hazards and hazardous materials in the area.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is no impact from the hazards and hazardous materials in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact from the hazards and hazardous materials in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact from the hazards and hazardous materials in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the hazards and hazardous materials in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is a less than significant impact from the hazards and hazardous materials in the area with mitigation measures.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact from the hazards and hazardous materials in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact from the hazards and hazardous materials in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact from the hazards and hazardous materials in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution does not mention the impact on the environment in the area. It also does not mention the impact from the hazards and hazardous materials in the area.

Project ID	Project Name	Environmental Document Summary
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact from the hazards and hazardous materials in the area with mitigation measures.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact from the hazards and hazardous materials in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact from the hazards and hazardous materials in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact from the hazards and hazardous materials in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact from the hazards and hazardous materials in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact from the hazards and hazardous materials in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is a less than significant impact from the hazards and hazardous materials in the area with mitigation measures.

6.8.3 Cumulative Impact Evaluation

6.8.3.1 Existing or Proposed School

Impact: *The project would not contribute to the exposure of students to potential significant cumulative impacts related to hazardous emissions within one-quarter mile of an existing or proposed school.*

Threshold:	Would the project emit hazardous emissions or handle acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Cumulative Impact Analysis

Cumulative developments within the City of Moreno Valley may be located within one-quarter mile of an existing or proposed school and could emit hazardous emissions and/or handle acutely hazardous materials, substances, or waste. Therefore, the increases in potential exposure of school-age children to hazardous emissions or substances could result in significant cumulative impacts associated with exposure. There are no existing school facilities within one-quarter of a mile of the project area. The nearest existing school is Calvary Chapel Christian School which is located approximately 1.17 miles northwest of the project. There is one proposed elementary school site that is located within one-quarter mile of the WLC project area. The site for proposed Wilmot Elementary School is planned to be located on Bay Avenue at Wilmot Street, approximately 0.25 mile west of the project area.

The amount and type of materials that would be used during project construction (building and infrastructure) or stored in the high-cube logistics distribution center after construction is unknown at this time. The emission of air pollutants is discussed in the Air Quality Section of the EIR. While the warehouse facilities themselves are not expected to use acutely hazardous materials, the possibility exists that such materials could be stored or transported to and from the project site. For the purposes of this analysis, it is assumed that the project would handle substances that may be acutely hazardous. The handling of hazardous materials or emission of hazardous substances in accordance with the Hazardous Materials Business Emergency Plan (HMBEP) as required by applicable local, State, and Federal standards, ordinances, and regulations would ensure that impacts associated with environmental and health hazards related to an accidental release of hazardous materials or emissions of hazardous substance near existing or proposed schools would be less than significant. The project would not contribute to cumulative safety hazards for school-age children within ¼-mile of the project because the nearest existing school is 1.17 miles from the project site; therefore, the project would not cause or contribute to any potential significant cumulative impacts to existing schools.

Many of the cumulative projects would use, handle, store, and/or transport hazardous materials or require demolition of structures containing such materials within ¼-mile of a proposed school. Cumulative projects would be required to use, store, and transport all potentially hazardous materials in accordance with the manufacturers' instructions and handle materials in accordance with Federal, State, and local health and safety standards and regulations. Compliance with existing standards and regulations would ensure that projects in the cumulative scenario would not result in significant impacts to the public, including school-age children, or the environment through the routine transport, storage, use, or handling of hazardous materials. Some of the cumulative projects may be on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. However, each cumulative project would be required to comply with existing Federal, State, and local regulations related to hazardous material sites, including cleanup sites, and hazardous materials generators. As such, cumulative development would account for clean-up of many existing hazardous conditions and would not result in significant cumulative impacts related to the exposure of students to hazardous emissions within 0.25-mile of a proposed school.

Significance Level Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.8.3.2 Routine Transport, Use, Disposal of Hazardous Materials and Reasonable Foreseeable Upset and Accident Conditions

Impact: *The project would contribute incrementally to a less than significant cumulative hazard to the public through the routine transport, use, or disposal of hazardous materials or through* reasonably foreseeable upset and accident conditions.

Threshold:	Would the project create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident?

Cumulative Impact Analysis

Cumulative projects (such as MV-4, and MV-48) in the City of Moreno Valley would routinely transport, use, or dispose of hazardous materials. Further, these cumulative projects could create significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions during construction or operation activities. Related projects would be required to use, store, and transport all potentially hazardous materials in accordance with the manufacturers' instructions and handle materials in accordance with Federal, State, and local health and safety standards and regulations. Compliance with existing standards and regulations would ensure that the projects in the cumulative scenario would not result in significant impacts to the public or the environment through the routine transport, storage, use, or handling of hazardous materials. Some of the cumulative projects may be on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. However, each such project would be required to comply with existing Federal, State, and local regulations related to hazardous material sites, including cleanup sites, and hazardous materials generators. As such, cumulative development would account for clean-up of many existing hazardous conditions and would not result in cumulatively significant impacts.

The project's incremental less than significant contribution, in combination with the impacts of other cumulative projects, could create a significant impact related to this issue. Some of these risks are site-specific and localized, such as businesses that handle hazardous materials within their facilities (i.e., on site); these types of hazmat impacts are generally limited to the project site. It is also possible there would be incrementally increased impacts by the transport and disposal of hazardous materials related to warehouse operations on the project site. For example, the substantial increase in trucks in and around the WLC site would incrementally increase the risks of accidents involving truck-related fuels (e.g., fire or explosion). However, the number of trucks containing hazardous materials on the road in a given area at any given time would be difficult if not impossible to calculate, and it would be likewise difficult to estimate the number and/or location of accidental spills and leaks, which, by their nature, are accidental or unplanned occurrences, it would be impossible to predict the specific occurrence of such events on the project site. Despite these uncertainties, it is reasonable to assume that with an increase in vehicles transporting hazardous materials would incrementally increase the potential for accidents on a regional basis. However, the enforcement of applicable local, State, and Federal standards, ordinances, and regulations will ensure that potential cumulative impacts associated with environmental and health hazards related to an accidental release of hazardous materials would be less than significant.

Significance Level Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.8.3.3 Located on a List of Hazardous Material Sites

Impact: *The project's less-than-significant contribution to cumulative hazards to the public or the environment by being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would not cause or contribute to a significant cumulative effect.*

Threshold:	Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Cumulative Impact Analysis

Several cumulative projects could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment. However, these projects would be required to comply with existing Federal, State, and local regulations related to hazardous material sites, including cleanup sites, and hazardous materials generators. As such, cumulative development would account for clean-up of many existing hazardous conditions and would not result in cumulatively significant impacts.

The project site is not located on a site compiled pursuant to Government Code Section 65962.5. As a result, the project's contribution to potential cumulative impacts related to development on a hazardous materials site would not cause or contribute to a significant cumulative effect.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.8.3.4 Conflict with Emergency Response Plans

Impact: *The project's less than significant contribution to cumulative interference with an adopted emergency response plan or emergency evacuation would not cause or contribute to a significant cumulative effect.*

Threshold:	Would the project impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation?

Cumulative Impact Analysis

Cumulative projects within the City of Moreno Valley could result in interference with an adopted emergency response plan or emergency evacuation plan. However, this would be based on the location of the project and the project-specific design requirements. The risks associated with impairment or physical interference with an adopted emergency response plan or emergency evaluation plan in the City can only be reduced through conformance with police, fire, building code regulations, and the responsible transportation authority. It is anticipated that cumulative projects would request the appropriate approvals and be in conformance with applicable codes and regulations. Therefore, cumulative development would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The project has been designed and would be constructed and maintained in accordance with applicable standards associated with vehicular access, ensuring that adequate emergency access and evacuation would be provided. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles

through/around any required road closures. Compliance with existing regulations for emergency access and evacuation would ensure that impacts related to this issue would be less than significant. As a result, the project's incremental less than significant contribution to any potential cumulative impacts related to emergency response and evacuation would not cause or contribute to a significant cumulative impact.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.8.3.5 Wildland Fire Risks

Impact: *The project's incremental less than significant contribution to cumulative human and structural risks associated with wildland fires would not cause or contribute to a significant cumulative effect.*

Threshold:	Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Cumulative Impact Analysis

The City of Moreno Valley is subject to both wildland and urban fires. Wildfires pose a threat to the northern and eastern portions of the City. Cumulative projects in the City could be located in areas subject to wildland and urban fires. Cumulative impacts involving wildfires consists of future development adjacent to a High Fire Hazard Area. The risk to each future project is based on the location and interface between urbanized area and wildland areas. The risks associated with development in these area can only be reduced through the additional/improved fire stations, equipment, additional personnel, and conformance with Fire and Building Code regulations, it is anticipated that cumulative development within the project area would not create a significant and cumulative impact associated with wildland fire hazards.

Development of the eastern portion of the project site could expose persons or property to wildland fire risks given the proximity of the project area adjacent to a High Fire Hazard Area. Regardless of this proximity, all new structures in the project area must be constructed in compliance with Title 24 of the California Code of Regulations to safeguard life and property from fire hazards, including the installation of automated fire suppression systems. Compliance with these standards would be enforced during building permit review and the construction inspection period. In addition, no development would be allowed within the San Jacinto Fault Zone, which runs parallel to, and west of Gilman Springs Road; this area of limited development would serve as a fuel or fire break to help protect future occupied uses within the project area. Compliance with existing standards, codes and regulations for fire safety would ensure that cumulative impacts related to this issue would be less than significant. The project's incremental less-than-significant contribution, in combination with the impacts of other cumulative projects, would not cause or contribute to significant cumulative impacts related to risks from wildland fires.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.8.3.6 On-site Conditions Involving Hazardous Materials

Impact: *The project's contribution to cumulative hazardous materials impacts from the demolition of existing on-site structures and excavation of potential contaminated soil would be cumulatively considerable.*

Threshold:	Would the project create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials?

Cumulative Impact Analysis

Cumulative development in the project area could result in the demolition and removal of structures containing hazardous building materials such as asbestos containing materials (ACM) and lead based paint (LBP). As discussed above, cumulative development could result in the routine use, transport, or disposal of hazardous materials.

The project could result in the exposure of onsite workers and the environment to hazardous building materials. This exposure could result in significant impacts. In addition, the Specific Plan proposes an alternative fuels station to be constructed in the Specific Plan area. It would provide fuels for motor vehicles visiting the project. Since this facility would store large volumes of motor fuel including natural gas under liquefied and compressed conditions, there is a potential for fire and/or explosion. This is a potentially significant hazards impact. The project's incremental impacts, together with the incremental impacts of other projects in the cumulative scenario, would result in significant cumulative hazard impacts involving the use, transport, or disposal of hazardous materials. The project's incremental contribution would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Implementation of **Mitigation Measures 4.8.6.1A, 4.8.6.1B, 4.8.6.1C,** and **4.8.6.1D** is required.

Significance Level After Mitigation: Less than significant impact.

6.9 Hydrology and Water Quality

Cumulative effects to hydrology and water quality are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to hydrology and water quality issues is provided in Section 6.9.1. The geographic and temporal scopes for hydrology and water quality issues are provided in Section 6.9.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the hydrology and water quality issues are discussed in Section 6.9.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.9.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.9-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative effect and, if so, whether the project's contribution would be cumulatively considerable.

6.9.1 Project Impact Findings

The project's effects to hydrology and water quality are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.9 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Would the project:

- Expose people or structure to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? **Less than Significant, Section 4.9.5.1.**
- Expose people or structure to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow? **Less than Significant, Section 4.9.5.2.**
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level? **Less than Significant, Section 4.9.5.3.**
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows? **Less than Significant, Section 4.9.5.4.**

- Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? **Less than Significant, Section 4.9.5.4.**
- Substantially alter the existing local drainage patterns of the site and substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion, siltation, or flooding on site or off site? **Less than Significant with Mitigation, Section 4.9.6.1, Impact 4.9.6.1.**
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? **Less than Significant with Mitigation, Section 4.9.6.1, Impact 4.9.6.1.**
- Violate any water quality standards or waste discharge requirements during construction phases of the project in form of increased soil erosion, sedimentation, or storm water discharges? **Less than Significant with Mitigation, Section 4.9.6.2, Impact 4.9.6.2.**
- Violate any water quality standards or waste discharge requirements during the operational phases of the project in the form of increased soil erosion, sedimentation, or urban runoff? **Section 4.9.6.3, Impact 4.9.6.3.**

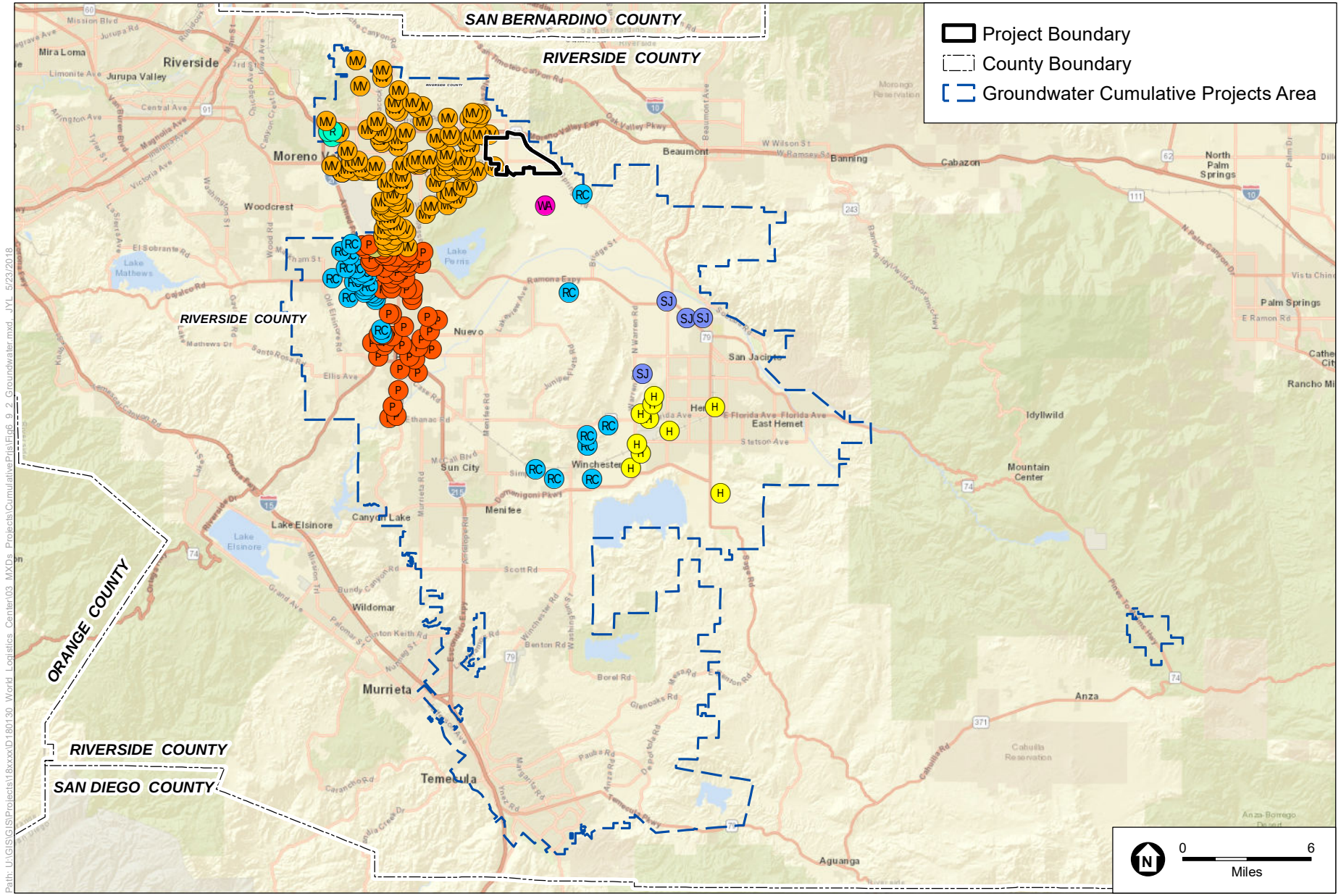
As shown, there are no unmitigated project-specific significant and unavoidable impacts to hydrology and water quality associated with the project.

6.9.2 Geographic and Temporal Scope

To determine the project's cumulative impacts to hydrology and water quality, the tributary drainage area, flow direction of stormwater runoff from the project site were considered as were downstream drainage areas and facilities. As outlined in the FEIR, stormwater runoff from the project site flows in a southerly direction to the San Jacinto River. As shown in Figure 6.9-1 and 6.9-2, a topographic divide located west of World Logistics Center Parkway separates stormwater flows from the project site to the San Jacinto River by two routes. Runoff west of the divide flows to the Perris Valley Storm Drain (PVSD) at a gradient also ranging from 1 to 2 percent. Runoff east of the divide flows through the San Jacinto Valley at a gradient also ranging from 1 to 2 percent to the San Jacinto Wildlife Area (SJWA).

The area tributary to the PVSD consists of two subareas, Sunnymead and Moreno, as delineated by the Riverside County Flood Control & Water Conservation District (RCFC&WCD). The PVSD watershed begins in the Badlands to the north and extends to Mariposa Avenue to the south, Ellsworth Street to the west, and the topographic divide within the project site to the east. The area tributary to the SJWA incudes the Middle and Upper San Jacinto River watershed area and extends from the Badlands to the north, the Bernasconi Hills and Lakeview Mountains to the south, the headwaters of the San Jacinto River to the east, and the topographic divide just west of World Logistics Center Parkway. Both the PVSD and the SJWA watershed areas flow to the lower San Jacinto River south of the project site. Flows are then conveyed through the lower San Jacinto River to Canyon Lake, again to the lower San Jacinto River, and ultimately to Lake Elsinore.

For the PVSD area, SJWA, and other portions of the San Jacinto River watershed areas, the past, present, and probable future projects were identified and included in the cumulative impacts analysis. These projects are listed in Table 6.9-1 and shown on Figure 6.9-1. For the area tributary to the PVSD there are a total of 106 projects. These projects consist of a variety of project types and sizes including various commercial areas such as a gas station, a commercial auto mall, a Walmart, and several apartments and single-family developments. For the area tributary to the SJWA, there are 14 planned projects, including four projects adjacent to, within, or near the SJWA. These four projects are the Badlands Landfill Improvement Project, the Quail Ranch Specific Plan, the SJWA Land Management Plan and the Villages of Lakeview Project. For the other portions of the San Jacinto Watershed south of the PVSD area and SJWA there are 120 projects consisting of a variety of commercial, business and residential projects.



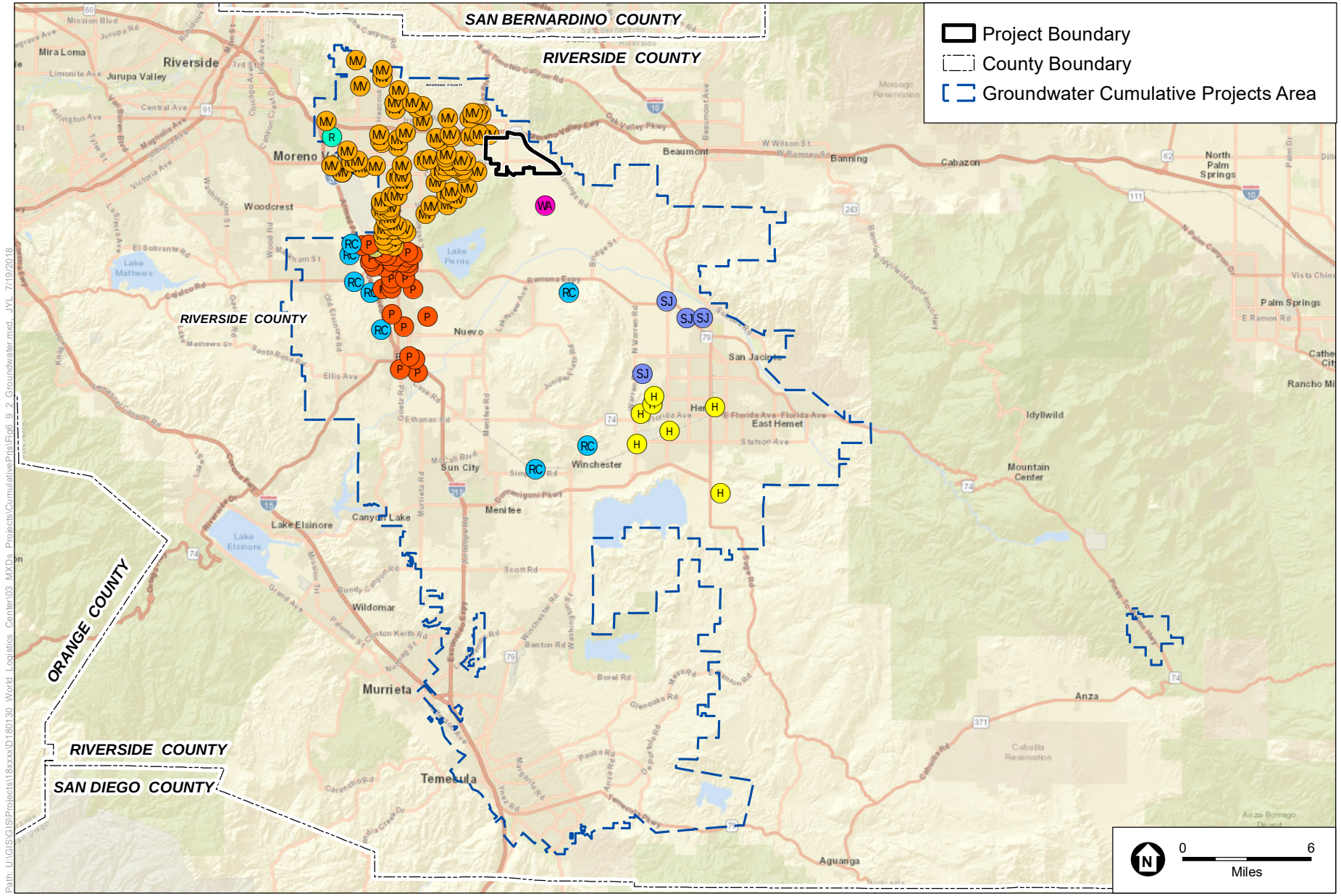
SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.9-1

Groundwater Cumulative Projects Area

ESA



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.9-2
Groundwater Cumulative Projects Area

ESA

Each of the projects are required to mitigate their impacts for hydrology and water quality and implement BMPs pursuant to the local agency's regulations such as the Moreno Valley Municipal Code Chapter 8.10 et seq. and § 8.21.170. Per the local regulations, each project is required to prepare a Water Quality Management Plan and comply with the Santa Ana Regional Quality Control Board Order No. R8-2010- 0033, NPDES Permit No. CAS618033 (NPDES Permit). The environmental documents, where available, were reviewed for each project to determine the type of drainage and water quality facilities to be constructed incompliance with the NPDES Permit. Each project was required to construct drainage and water quality facilities to mitigate the impacts. Each project analyzed cumulative impacts and concluded that the impacts would be less than significant since all projects in the watershed are required to comply with the local agency's drainage requirements and NPDES Permit and mitigate their individual impacts. The drainage facilities consisted of construction of storm drains and detention basins to mitigate increased peak flows, velocities and volumes.

The types of water quality facilities constructed include extended detention/sedimentation basins, infiltration basins, water quality basins sand filters, vegetated swales, and bioretention areas. For example, the ProLogis project includes on-site extended detention/sedimentation basins, sand filters, and vegetated swales which will treat all of the site's runoff. The Moreno Valley Logistics Center (MV-54) includes on-site, structural source control best management practices (BMPs) consisting of six water quality/detention basins as well as operational source controls prior to water being discharged from the site. The First Nandia Logistics Center includes three detention and water quality basins. The Modular Logistics Center (MV-44) constructed two water quality detention basins. The Villages of Lakeview Project includes construction of two regional water quality basins prior to flows being discharged to the San Jacinto River, although the majority go the project area is downstream of the SJWA. The SJWA Land Management Plan includes construction of source control and low impact development (LID) BMPs including bioretention facilities, infiltration trenches, filter strips, or vegetated buffers to detain and treat runoff before letting it seep away slowly. The Quail Ranch Project does not have an environmental document completed yet. However, the Quail Ranch Project will be required to comply with the local regulations and NPDES permit, as well.

The cumulative projects geographic boundary for hydrology/water quality is shown in Figure 6.9-1. The projects located within the hydrology and water quality impact area is listed in Table 6.9-1.

The project would contribute to cumulative hydrology and water quality conditions starting with the initiation of onsite work and lasting for the duration of the project.

Table 6.9-1 – Hydrology and Water Quality Cumulative Projects Summary

Project ID	Project	Environmental Document Summary
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The EIR states that the water quality is of satisfactory quality. Impact from the project is not mentioned.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. There is no impact on the hydrology and water quality in the area.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. There is a less than significant impact on the hydrology and water quality in the area.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. The excerpt does not mention an impact on the hydrology and water quality in the area.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. There is no impact on the hydrology and water quality in the area.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. There is a less than significant impact on the hydrology and water quality in the area.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The SEIR does not mention an impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. There is a less than significant impact on the hydrology and water quality in the area.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR , the project would result in the development of a 130 acre business park. There is a less than significant impact on the hydrology and water quality in the area.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. There is no impact on the hydrology and water quality in the area.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. There is no impact on the hydrology and water quality in the area.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the hydrology and water quality in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the hydrology and water quality in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the hydrology and water quality in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the hydrology and water quality in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the hydrology and water quality in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact on the hydrology and water quality in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the hydrology and water quality in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the hydrology and water quality in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact on the hydrology and water quality in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is a less than significant impact on the hydrology and water quality in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant impact on the hydrology and water quality in the area.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the hydrology and water quality in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the hydrology and water quality in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the hydrology and water quality in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the hydrology and water quality in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on the hydrology and water quality in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the hydrology and water quality in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact on the hydrology and water quality in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the hydrology and water quality in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the hydrology and water quality in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no new impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is no impact on the hydrology and water quality in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is a less than significant impact on the hydrology and water quality in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically mention an impact on the hydrology and water quality in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is a less than significant impact on the hydrology and water quality in the area.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact on the hydrology and water quality in the area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the hydrology and water quality in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the hydrology and water quality in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is a less than significant impact on the hydrology and water quality in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is a less than significant impact on the hydrology and water quality in the area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. The resolution does not specifically mention an impact on hydrology and water quality in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the hydrology and water quality in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the hydrology and water quality in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the hydrology and water quality in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the hydrology and water quality in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the hydrology and water quality in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the hydrology and water quality in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is a less than significant impact on the hydrology and water quality in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the hydrology and water quality in the area.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the hydrology and water quality in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the hydrology and water quality in the area with mitigation measures.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the hydrology and water quality in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant impact on the hydrology and water quality in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the hydrology and water quality in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the hydrology and water quality in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the hydrology and water quality in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the hydrology and water quality in the area.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. It does not specifically mention an impact on the hydrology and water quality in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the hydrology and water quality in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the hydrology and water quality in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the hydrology and water quality in the area.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is a less than significant impact on the hydrology and water quality in the area.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the hydrology and water quality in the area.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the hydrology and water quality in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the hydrology and water quality in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the hydrology and water quality in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the hydrology and water quality in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the hydrology and water quality in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there is no impact on the environment in the area. It does not specifically mention an impact on the hydrology and water quality in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution states that the project is exempt from CEQA guidelines. It does specifically mention an impact on the hydrology and water quality in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the hydrology and water quality in the area.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the hydrology and water quality in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the hydrology and water quality in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the hydrology and water quality in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the hydrology and water quality in the area.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. There is no impact on the hydrology and water quality in the area.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. There is a less than significant impact on the hydrology and water quality in the area.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.

Project ID	Project	Environmental Document Summary
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. There is a less than significant impact ton the hydrology and water quality in the area with mitigation measures.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. There is no impact on the hydrology and water quality in the area.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The project would have a less than significant impact on water quality.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. There is a less than significant impact on the hydrology and water quality in the area.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. There is a less than significant impact on the hydrology and water quality in the area.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. There is a less than significant impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. There is a less than significant impact on the hydrology and water quality in the area.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. There is no impact on the hydrology and water quality in the area.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. There is a less than significant impact on the hydrology and water quality in the area.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. There is a potentially significant impact on the hydrology and water quality in the area.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. There is a less than significant impact on the hydrology and water quality in the area.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. There is a potentially significant impact on the hydrology and water quality in the area.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. There is a less than significant impact on the hydrology and water quality in the area.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.

Project ID	Project	Environmental Document Summary
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. There is a potentially significant impact on the hydrology and water quality in the area.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. There is a less than significant impact on the hydrology and water quality in the area.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The slides do not specifically mention an impact on the hydrology and water quality in the area.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. There is no impact on the hydrology and water quality in the area.

Project ID	Project	Environmental Document Summary
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. There is a less than significant impact on the hydrology and water quality in the area.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. There is potentially significant impact on the hydrology and water quality in the area with mitigation measures.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. There is a less than significant impact on the hydrology and water quality in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is a less than significant impact on the hydrology and water quality in the area with mitigation measures.

Table 6.9-2: Water Quality Cumulative Projects Summary

Project ID	Project	Type of Environmental Document
H-3	Tres Cerritos Specific Plan	NOC
H-4	Sanderson Square	IS
H-5	McSweeny Farms Specific Plan	EIR
H-6	Ramona Creek Specific Plan	EIR
H-7	Peppertree Specific Plan	IS
H-9	Pulte Del Web (TTM 31807 and 31808)	SEIR
H-10	Downtown Hemet Specific Plan	MND
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	ND
MV-3	ProLogis	EIR
MV-4	Westridge Commerce Center	EIR
MV-7	TR33962 / Pacific Scene Homes	ND
MV-8	TR32460 / Sussex Capital	ND
MV-9	TR32459 / Sussex Capital	ND
MV-10	TR30998 / Pacific Communities	ND
MV-11	TR30411 / Pacific Communities	ND
MV-14	TR32548 / Gabel, Cook & Associates	ND
MV-15	TR32218 / Whitney	ND
MV-16	TR32284 / 26thCorporation & Granite Capitol	ND
MV-17	TR31590 / Winchester Associates	ND
MV-18	Convenience Store / Fueling Station	ND
MV-19	Senior Assisted Living	ND
MV-20	Moreno Marketplace	ND
MV-21	PEN16-0053 Medical Center	MND
MV-22	TR36882 (PA15-0010) SFR	MND
MV-24	TM 36436 (PA12-0005)	MND
MV-25	TR32142	ND
MV-27	TR32917 / Empire land	ND
MV-28	TR34329 / Granite Capitol	ND
MV-29	TR36340	ND
MV-30	PA03-0168 TR 31517	ND
MV-32	TTM 31592 (P13-078) SFR	ND
MV-33	TR32645 / Winchester Associates	ND
MV-34	TR34397 / Winchester Associates	ND
MV-35	TR31771 / Sanchez	ND
MV-36	TM 31618 (PA03-0106)	EIR
MV-37	Vogel /PA09-004	EIR
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	EIR
MV-41	First Nandina Logistics Center	EIR
MV-42	Indian Street Commerce Center	EIR

Project ID	Project	Type of Environmental Document
MV-43	Ivan Devries / PA06-0017	ND
MV-44	Modular Logistics Center (Kearny RE Co)	EIR
MV-45	Iris Plaza	IS
MV-47	PA07-0129 TR 35606 SFR	EXEMPT
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	EIR
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	MND
MV-50	San Michele Industrial Center, (Industrial Area SP)	ND
MV-51	Nandina Distribution Center IDS	MND
MV-52	First Industrial III & IV, (Industrial Area SP)	MND
MV-53	I-215 Logistics Center (Amazon)	MND
MV-54	Moreno Valley Logistics Center (Prologis)	EIR
MV-56	Tract Map 33810	EXEMPT
MV-57	Tract Map 34151	ND
MV-58	Tract Map 33024	ND
MV-59	Tract Map 31442	ND
MV-60	Tract Map 36401	MND
MV-61	Walmart & Gas Station	EIR
MV-63	PA14-0053 (TTM 36760) Legacy Park	MND
MV-65	TR33607 / TL Group	ND
MV-66	TR34988 / Stratus Properties	ND
MV-67	TR32515	ND
MV-68	PA07-0035	ND
MV-69	PA07-0039, (Industrial Area SP)	ND
MV-75	Aqua Bella Specific Plan	EIR
MV-78	Overton Moore Properties PA08-0072	MND
MV-79	Shaw Development	MND
MV-80	PA15-0032 MV Cactus Center	MND
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	ND
MV-84	PA16-0075 Brodiaea Business Center	ND
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	ND
MV-86	TR32505 / DR Horton	ND
MV-88	TR33771 / Creative Design Associates	EXEMPT
MV-89	TR35663 / Kha	EXEMPT
MV-91	TR31305 / Richmond American	ND
MV-92	TR 33256	ND
MV-93	PA14-0042 Edgemont Apartments	EIR
MV-94	PA15-0002 Box Springs Apartments	MND
MV-95	Moreno Beach Marketplace / Lowes	MND

Project ID	Project	Type of Environmental Document
MV-96	31394 Pigeon Pass, Ltd.	ND
MV-97	32005 Red Hill Village, LLC	ND
MV-98	33388 SCH Development, LLC	ND
MV-100	32215 Winchester Associates "Scottish Village"	ND
MV-103	Gateway Business Park	MND
MV-106	35304 Jimmy Lee	ND
MV-110	TM 33417	ND
MV-111	35769 Michael Chen	EXEMPT
MV-112	PA09-0006 Jim Nydam	EXEMPT
MV-113	Ironwood Residential	MND
MV-114	Stoneridge Town Centre - Vacant Restaurant	ND
MV-116	31621 Peter Sanchez	ND
MV-117	Riverside County Office Building	ND
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	ND
MV-119	32126 Salvador Torres	ND
P-2	TR34716	EIR
P-4	Bookend	NOI
P-5	Markham East	IS
P-7	Duke Warehouse	EIR
P-8	First Perry Logistics Project	MND
P-10	IDS	EIR
P-11	Ridge II	IS
P-12	Starcrest, P011-0005; 08-11-0006	EIR
P-14	Rados Distribution Center	EIR
P-15	Duke Perris Logistics Center I	EIR
P-16	Perris Ridge Commerce Center I	EIR
P-18	P07-07-0029	EIR
P-19	P05-0192	EIR
P-20	P05-0113	EIR
P-21	P07-09-0018	IS
P-22	NICOL	IS
P-23	Westcoast Textiles	IS
P-24	Optimus Logistics Center 1	EIR
P-25	Optimus Logistics Center 2	EIR
P-26	Duke Warehouse	IS
P-27	Perris DC (Industrial Property Trust)/Integra	EIR
P-28	Duke Warehouse	IS
P-30	Avelina	IS
P-31	Perris Family Apartments	IS

Project ID	Project	Type of Environmental Document
P-32	Lewis Retail Center	IS
P-35	Verano Apartments	IS
P-37	Cabrillo	IS
P-38	Sequoia	ND
P-58	Jordan Distribution	MND
R-5	Canyon Springs Healthcare Campus Specific Plan	EIR
RC-5	Villages of Lakeview -Residential/Commercial Development	EIR
RC-9	Oleander Business Park, PP20699	EIR
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	IS
RC-12	Cores Industrial Partners	ND
RC-34	Emerald Acres SP (SP00381)	IS
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	IS
RC-37	TR36504	IS
RC-38	San Gorgonio Crossings	EIR
SJWA-1	San Jacinto Wildlife Land Management Plan	EIR

This section also addresses potential cumulative impacts to groundwater. The cumulative impact geographic area for groundwater is the area under the jurisdiction of the Eastern Municipal Water District (EMWD) because groundwater within the EMWD is produced from groundwater basins underlying the EMWD service area. These two basins are the West San Jacinto Groundwater Basin Management Plan area and the Hemet/San Jacinto Water Management Plan area. In addition, EMWDD is a key player in the efforts to protect groundwater quality and reliability. Cumulative projects within the EMWD service area will be evaluated with the project to determine if a significant cumulative groundwater impact would occur. The cumulative projects geographic boundary for groundwater is shown in Figure 6.9B. The projects located within the groundwater impact area are listed in Table 6.9-2. The project would contribute to cumulative groundwater conditions starting with project-related alteration of on-site conditions and lasting for the duration of the project.

6.9.3 Cumulative Impact Evaluation

6.9.3.1 Seismic Flooding-Related Impacts

Impact: *The project's incremental impact would not cause or contribute to a significant cumulative effect associated with the exposure of people or structures to potential flooding from the failure of a levee or dam.*

Threshold:	Would the project expose people or structure to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Cumulative Impact Analysis

Cumulative development within the watershed that encompasses the project site and offsite improvement areas could be subject to potential flooding due to a failure of the nearest dam. The nearest dams to the project site are Pigeon Pass Dam at Poorman's Reservoir located approximately five miles northwest of the project site and Lake Perris Dam located approximately four miles southwest

of the project site. Although cumulative development could be exposed to inundation flooding, the project is not within anticipated inundation areas of either dam or any other dam as mapped within the City of Moreno Valley General Plan Final Program EIR. Therefore, the implementation of the project would not contribute to the exposure of people or structures to risk of loss, injury, or death involving flooding as a result of failure of either the Poorman Reservoir (Pigeon Pass Dam) or Lake Perris Dam. Therefore, the project would not cause or contribute to any cumulative effect associated with the exposure of people or structures to flooding.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.9.3.2 Seismic-Related Impacts

Impact: *The project would not cause or contribute to a significant cumulative impact relating to the exposure of people or structures to potential significant cumulative inundation impacts from seiche, tsunami, or mudflow.*

Threshold:	Would the project expose people or structure to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?

Cumulative Impact Analysis

Cumulative development within the watershed that encompasses the project site and offsite improvement areas would not be subject to potential inundation by seiche or tsunami. As described in Section 4.9.5.2, the nearest enclosed body of water that could be subjected to seiche conditions is Lake Perris, but the Perris Dam has been designed to prevent seiche phenomena. The watershed is not located near the Pacific Ocean which is where tsunami risks occur. Therefore, cumulative development would not expose people or structures to inundation flooding due to seiche or tsunamis. As a result, the project would not cause or contribute to any significant cumulative seiche or tsunami inundation impacts.

Cumulative development within the watershed could expose people and structures to mudflow inundation due to the presence of steep slopes within the watershed. This exposure could result in significant cumulative impacts. However, because the project site as well as offsite improvement areas do not have steep slopes, the project's contribution to potential cumulative mudflow inundation impacts would not be cumulatively considerable.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Not cumulatively considerable.

6.9.3.3 Groundwater

Impact: *The project would not cause or contribute to a significant cumulative depletion of groundwater supplies or the interference with groundwater recharge.*

Threshold:	Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

Cumulative Impact Analysis

Cumulative development within the Eastern Municipal Water District (EMWD) service area is planned to be supplied exclusively with imported water provided by the Metropolitan Water District. Therefore, cumulative development would not deplete groundwater supplies from use of groundwater. As a result, the project would not contribute to cumulative impacts to groundwater supplies.

Cumulative development would reduce the amount of pervious surfaces within the EMWD service area. This reduction of potential groundwater infiltration areas could cause a significant impact on groundwater recharge. However, because the project includes the implementation of bioretention areas and detention basins that would provide for infiltration opportunities, the project's contribution to potential significant cumulative groundwater infiltration impacts would not be cumulatively considerable.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Not cumulatively considerable.

6.9.3.4 100-Year Flooding-Related Impacts

Impact: *The project would not cause or contribute to significant impacts relating ot the placement of structures within a 100-year flood hazard area that would impede or redirect flood flows.*

Threshold:	Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?
Threshold:	Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Cumulative Impact Analysis

Cumulative development within the watershed that encompasses the project site and offsite improvement areas include areas subject to 100-year storms according to the FEMA FIRM maps. Therefore, cumulative development could expose structures or housing to flood hazards and result in significant cumulative flood hazard impacts. However, because the project and offsite improvements would not located in any areas subject to flooding during a 100-year storm, the implementation of the project would not cause or contribute to any potential significant cumulative flood hazard to structures or housing.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.9.3.5 Drainage Pattern and Capacity-Related Impacts

Impact: *The project's incremental contribution would not cause or contribute to significant cumulative impacts to erosion, siltation, or flooding due to alterations of existing drainages or exceedance of drainage capacities or the addition of pollutant runoff.*

Threshold:	Would the project substantially alter the existing local drainage patters of the site and substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion, siltation, or flooding on site or off site?
Threshold:	Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Cumulative Impact Analysis

Cumulative development within the watershed will result in an increase in impervious surfaces in addition to changes in land use and associated pollutant runoff characteristics. Increased impervious surfaces are likely to alter existing hydrology by potentially increasing surface water runoff and increase potential pollutant loads. Following are the evaluations of cumulative hydrology and cumulative erosion, siltation and flooding impacts.

Hydrology

To analyze the cumulative impacts for hydrology, the geographic scope was determined based on the watershed area and potential impacts to downstream drainage facilities. As discussed above, the proposed project is located in the San Jacinto River watershed and is tributary to two separate sub-watershed areas, the PVSD Watershed and the SJWA watershed, prior to flows reaching the San Jacinto River. For the area to the west, the PVSD is the most downstream drainage facility that the WLC Project is tributary to before flows reach the San Jacinto River. It is necessary to consider the downstream drainage areas and their facilities when evaluating cumulative impacts for hydrology. The PVSD is a major drainage facility draining a large area including the City of Moreno Valley and any flow impacts to the facility would be important to analyze the effects. For this reason, on the west side, the area tributary to the PVSD was selected as the geographic area for the cumulative impacts analysis. On the east side, flows drain to the SJWA before reaching the San Jacinto River. The SJWA is an important habitat and water feature within the watershed and it is necessary to analyze any potential flow impacts to the area. For this reason, for flows draining to the east, the area tributary to the SJWA was chosen as the geographic area for considering potential cumulative effects. This area includes the upstream portion of the San Jacinto Watershed as the SJWA extends to the south side of the San Jacinto River.

As discussed in Section 4.9 of the FEIR, runoff from the western portion of the project site flows west toward the Perris Valley Storm Drain (PVSD), while runoff from the eastern portion of the project site flows south into Mystic Lake, and (during times of high storm flow), reaches the San Jacinto River south of the San Jacinto Wildlife Area. Table 6.9-1 identifies the cumulative projects that are located in each watershed.

PVSD Watershed Area

The PVSD watershed area is divided into two sub-watersheds, Sunnymead and Moreno, tributary to the PVSD. The RCFC&WCD has adopted Master Drainage Plans (MDPs) for each of the sub-watershed areas, Sunnymead MDP (RCFC&WCD, 1991) and Moreno MDP (RCFC&WCD, 2015) that serve as guides for development in these areas. The Moreno MDP was recently updated to include the hydrology of the WLC development. Potentially cumulative projects (such as MV-39, MV-41 and MV-48) would be required to conform to the MDPs by mitigating any increase in project flows such that any flows leaving the project boundary would be equal to or less than existing conditions. In addition, the cumulative projects would be required to contribute through the MDP Fee Program for the construction of facilities identified in the MDPs. Many of the cumulative projects such as MV-39, MV-41 and MV-48 include infiltration and/or detention basins to reduce offsite flow.

Portions of the proposed project are tributary to Line “F” of the Moreno MDP. As identified in the FEIR, Line “F” from Redlands Blvd to south of Eucalyptus Avenue would be constructed as part of the

proposed project. Because it is not known when the proposed Moreno MDP Sinclair Basin north of SR-60 will be constructed, Line "F" was sized without the Sinclair Basin and all flows pass under SR-60. In addition, a detention/infiltration basin would be constructed to detain and infiltrate onsite flows as required by Mitigation Measures 4.9.6.1A and 4.9.6.1B such that flows leaving the project boundary will be less than existing in terms of peak flow, velocities, and volume for each of the 2, 5, 10, 25, and 100-year storms. As such, there would be no impact on downstream drainage facilities as a result of the development of the proposed project and the project would not cause or contribute to any cumulative impacts. In addition, construction of Line "F" by the project would exceed its obligation of MDP fees. An analysis of the volume of runoff and infiltration for the pre- and post- project conditions was performed which included hydrologic modeling. Pre-project conditions consist of agricultural uses. Post-project conditions consist of the development of the project. Post-project detention basins would be constructed not only for storm peak attenuation, but also for infiltration. The analysis showed that the project's impacts would be fully mitigated with the implementation of the detention/ infiltration basins.

The volume of runoff after the project is constructed would be less than the existing volume of runoff and the amount of infiltration and groundwater recharge would increase by a small amount, which would provide a net benefit to groundwater recharge. The proposed project's drainage improvements would be designed to have sufficient capacity to accommodate and convey storm water runoff flows generated by the project as well as expected future storm water runoff flows associated with buildout of the Moreno MDP area. All of the cumulative projects in the Moreno MDP and Sunnymead MDP areas would be required to mitigate flows to equal to or less than existing and/or demonstrate that storm drain capacity is available to service their anticipated flows and that their project is consistent with the MDPs. Section 15130 (a) (3) of the CEQA Guidelines states "A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." The project's compliance with the Moreno MDP meets this requirement. In addition, there would be zero hydrologic impact on downstream drainage facilities due to the project; therefore, the project would not contribute to any cumulative impacts. As such, cumulative impacts would be less than significant.

SJWA Watershed Area

The portion of the project site located east of the topographic divide drains to the SJWA. In addition to the project, one current and one potential project are tributary to the SJWA. They are the Badlands Landfill Improvements Project located north of the project site and the Quail Ranch Specific Plan located southeast of the project site. Runoff from the Badlands Landfill flows through the project site. The hydrologic study for the project considered flows from the Badlands Landfill. The Badlands Landfill Improvement project does not change the pervious cover of the site. As such, flows from the Landfill Improvements Project would not increase above existing and would be consistent with the existing flows north of the project.

Downstream of the project site, the Quail Ranch Specific Plan Project is proposed. This cumulative project consists of a planned residential community. Currently, there are no specific details on this cumulative project. Stormwater flows generated by the cumulative project site could increase, however, the developer would be required to alleviate any increase in flows leaving a site and demonstrate that the cumulative project does not increase storm flows such as peak flow, velocities, and volume for each of the 2, 5, 10, 25, and 100-year storms. The cumulative project would be required to demonstrate that storm drain capacity is available to service the anticipated flows and that the project is consistent with the MDPs. As such, cumulative downstream capacity impacts within the SJWA watershed area would be less than significant. Because the project would reduce storm flows leaving the project site so that they do not exceed existing flows, the project's contribution to potential cumulative erosion and siltation impacts within the SJWA watershed area would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: Although no mitigation measures are required; the applicant has committed to implementing Mitigation Measures 4.9.6.1A and 4.9.6.1B to further reduce the project's less-than-significant contribution to the less than significant cumulative impact to erosion, siltation and flooding.

Significance Level After Mitigation: Less than significant cumulative impact.

6.9.3.6 Construction-Related Water Quality Impacts

Impact: *The project's incremental contribution would not cause or contribute to a significant cumulative increase in surface water pollution during construction.*

Threshold:	Would the project violate any water quality standards or waste discharge requirements during construction phases of the project in form of increased soil erosion, sedimentation, or storm water discharges?

Cumulative Impact Analysis

Cumulative projects within the watershed would result in disturbance of surface soils and removal of vegetative cover during construction activities that could potentially result in erosion and sedimentation and the degradation of surface water quality. In addition, cumulative construction activities that use on-site construction equipment could introduce a risk of storm water contamination in downstream conveyance facilities. Spills and leaks could occur from the use of construction equipment during construction activities as well as from construction equipment located within staging areas. These spills and leaks could include substances such as fuels, oils, solvents, and paints.

As each cumulative project receives construction approval, compliance with the National Pollutant Elimination System (NPDES) General Construction permit would be required. To comply, construction site BMPs would be required to control runoff, sediment, erosion and ensure that construction waste is adequately handled and disposed. These BMPs are required elements of a Stormwater Pollution Prevention Plan that describes the construction operator's activities to comply with the NPDES General Construction permit. Because cumulative projects would be required to comply with the requirements of the NPDES General Construction permit program, cumulative water quality impacts to downstream areas would be less than significant. The project's less than significant incremental contribution would not combine with the impacts of other projects in the cumulative scenario to cause or contribute to a significant cumulative effect.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: Although no mitigation measures are required; the applicant has committed to implementing Mitigation Measures 4.9.6.1A and 4.9.6.1B to further reduce the project's contribution to the less than significant cumulative water quality impacts during construction activities.

Significance Level After Mitigation: Less than significant cumulative impact.

6.9.3.7 Operational-Related Water Quality Impacts

Impact: *The project's contribution to the significant cumulative increase in surface water pollution during operation would be cumulatively considerable.*

Threshold:	Would the project violate any water quality standards or waste discharge requirements during the operational phases of the project in the form of increased soil erosion, sedimentation, or urban runoff?

Cumulative Impact Analysis

As discussed previously, the project site is tributary to two sub-watersheds, the Perris Valley Storm Drain and the San Jacinto Wildlife Area. Both sub-watersheds are tributary to the downstream Receiving Waters of the San Jacinto River, Canyon Lake and Lake Elsinore, two of which are impaired water bodies. Below is a discussion of cumulative water quality effects within the San Jacinto watershed. In addition, the water quality of runoff into the SJWA is also discussed.

San Jacinto Watershed

The operational activities associated with the cumulative projects would increase the potential for contaminants to enter stormwater runoff. Storm runoff from the roadways, parking lots, commercial and industrial buildings as well as residential uses can carry a variety of pollutants such as sediment, petroleum products, commonly utilized construction materials, landscaping chemicals, and (to a lesser extent) trace metals such as zinc, copper, lead, cadmium, and iron, which may lead to the degradation of storm water in downstream channels. Runoff from landscaped areas within cumulative projects may contain elevated levels of phosphorus, nitrogen, and suspended solids. Oil and other hydrocarbons from vehicles are also expected in cumulative stormwater runoff. These pollutants are commonly categorized into eight categories: sediments, nutrients, metals, toxic organic compounds, trash and debris, pathogens, oil and grease and pesticides. Table 6.9-3 identifies the downstream receiving waters from the project site and states if the receiving water is listed as impaired on the 303(d) List or has a total maximum daily load (TMDL) adopted for a certain type of pollutant.

Table 6.9-3: Pollutant Stressors in Receiving Waters

Storm Drain/Receiving Waters	303(d) Listing	Adopted TMDL Pollutants
San Jacinto River	None	None
Canyon Lake	Nutrients (Phosphorus & Nitrogen), Pathogens	Phosphorus, Nitrogen
Lake Elsinore	Nutrients, Organic Enrichment/Low Dissolved Oxygen, PCBs, Sediment Toxicity, Unknown Toxicity	Phosphorus, Nitrogen, Dissolved Oxygen

The operational activities associated with the cumulative projects within the San Jacinto watershed area have the potential to add pollutants to downstream Receiving Waters. The operational activities associated with the project have the potential to generate similar pollutants as those identified above for cumulative projects. These pollutants include sediment, petroleum products, commonly utilized construction materials, landscaping chemicals, and (to a lesser extent) trace metals such as zinc, copper, lead, cadmium, and iron. The addition of these pollutants have the potential to degrade downstream receiving waters. The impacts of the project together with the impacts of other projects in the cumulative scenario could result in significant cumulative water quality impacts during operational activities. Given the size of the project site and scale of the proposed development, the project's contribution to this significant water quality impact would be cumulatively considerable.

San Jacinto Wildlife Area

Cumulative development tributary to the SJWA includes one current and one potential project. They are the Badlands Landfill Improvements Project located north of the project site and the Quail Ranch Specific Plan located southeast of the project site. Runoff from the Badlands Landfill flows through the project site. The hydrologic study for the project considered flows from the Badlands Landfill. The future operational activities of the Quail Ranch Specific Plan could contribute pollutants to the San Jacinto Wildlife Area. The operational activities associated with the project could also contribute pollutants to stormwater runoff conveyed to the San Jacinto Wildlife Area. These pollutants include sediments, nutrients, metals, toxic organic compounds, trash and debris, pathogens, oil and grease and pesticides. The implementation of the cumulative development, including the project, could increase various

pollutants into the San Jacinto Wildlife Area, and thus result in significant cumulative water quality impacts during operational activities.

Given the size of the project site and scale of the proposed development, the project's contribution to this significant water quality impact would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: The implementation of Mitigation **Measures 4.9.63A** through **4.9.6.3C** would be required.

Significance Level After Mitigation: Less than cumulatively considerable contribution to the significant cumulative impact. The implementation of specific BMPs would control pollutant runoff from the project site to downstream areas within the San Jacinto Watershed as well as the San Jacinto Wildlife Area. The maintenance of the onsite water quality basins would ensure adequate facilities for stormwater treatment. Lastly, the establishment of a Water Quality Mitigation Monitoring Plan would allow periodic sampling of the quality of the storm flows before conveyance to downstream areas. The implementation of these measures would reduce the project's contribution to potential significant cumulative operational water quality impacts to a less than cumulatively considerable level.

6.10 Land Use and Planning

Cumulative effects to land use and planning are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to land use and planning is provided in Section 6.10.1. The geographic and temporal scopes of cumulative analysis are provided in Section 6.10.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the land use and planning issues are discussed in Section 6.10.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.10.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.10-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact to land use and planning and, if so, whether the propose project's incremental contribution would be cumulatively considerable.

6.10.1 Project Impact Findings

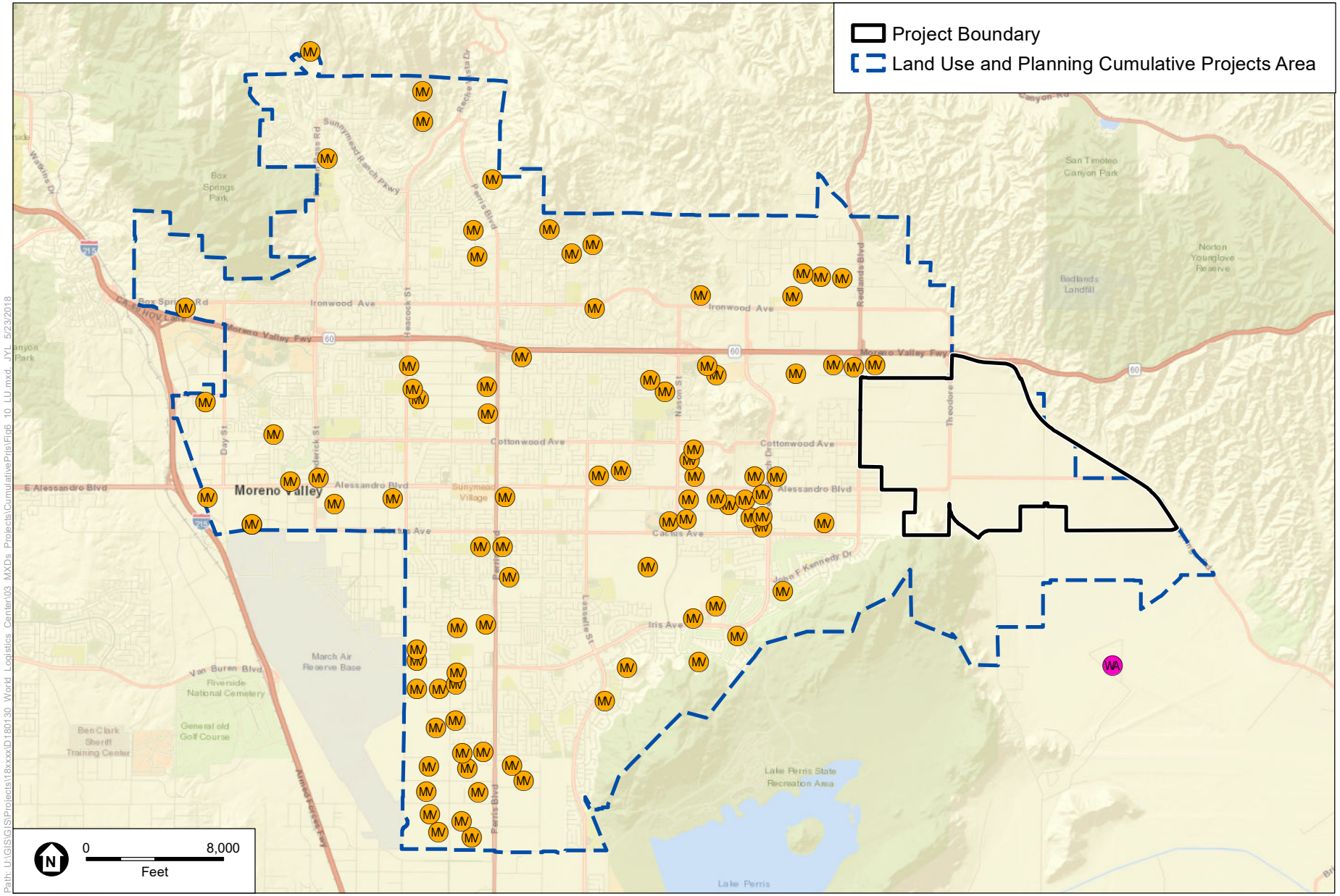
The project's effects to land use and planning are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.10 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Physically divide an established community; **Significant and Unavoidable, Section 4.10.6.**
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; **Less than Significant, Section 4.10.5.2.**
- Conflict with any applicable habitat conservation plan or natural community conservation plan. **Less than Significant, Section 4.10.5.1.**

6.10.2 Geographic and Temporal Scope

The cumulative impact geographic area for land use and planning is the City of Moreno Valley because the project site is located within the jurisdiction of the City of Moreno Valley. The City determines how the local plans and policies are implemented and determines how the regional plans and policies of the Southern California Association of Governments that include the City's jurisdiction are implemented. Cumulative impacts to land use and planning could result from the project in conjunction with other past, present and future projects located within the City of Moreno Valley. The project site is currently designated as Business Park in the Moreno Valley General Plan, and development of the project site is subject to the World Logistics Center Specific Plan. The incremental impacts of potentially cumulative projects within the City of Moreno Valley have been evaluated together with the impacts of the project to determine if a significant cumulative impact would occur. The geographic area for cumulative land use and planning impacts is shown on Figure 6.10-1. The projects located within the cumulative land use and planning impact area are listed in Table 6.10-1. The project would contribute to cumulative impacts to land use and planning from when development activities commence on the project site and would last for the duration of the project.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.10-1

Land Use and Planning Cumulative Projects Area

ESA

Table 6.10-1: Land Use and Planning Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a significant and unavoidable impact on the land use and planning in the area.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility would contribute to cumulative conflicts with land use policies and habitat conservation plan
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the land use and planning in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the land use and planning in the area.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the land use and planning in the area.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the land use and planning in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the land use and planning in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the land use and planning in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is a no impact on the land use and planning in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the land use and planning in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the land use and planning in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact on the land use and planning in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the land use and planning in the area.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is a less than significant impact on the land use and planning in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is no impact on the land use and planning in the area.
MV-24	TM 36436 (PA12-0005)	The Project's subdivision of 43.52 acres into 159 single family residential lots would contribute to cumulative conflicts with land use policies and habitat conservation plan
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the land use and planning in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the land use and planning in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the land use and planning in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on the land use and planning in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the land use and planning in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is a less than significant impact on land use and planning in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact on the land use and planning in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the land use and planning in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the land use and planning in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the land use and planning in the area.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is no impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is no impact on the land use and planning in the area.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is no impact on the land use and planning in the area.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact on the land use and planning in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is no impact on the land use and planning in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is a less than significant impact on the land use and planning in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically mention an impact on the land use and planning in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is a less than significant impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact on the land use and planning in the area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the land use and planning in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the land use and planning in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is no impact on the land use and planning in the area.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is no impact on the land use and planning in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is a significant and unavoidable cumulatively considerable impact on the land use and planning in the area.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. The resolution does not mention an impact on the land use and planning in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that there is no impact on the environment in the area. It does not mention an impact on the land use and planning in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the land use and planning in the area.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the land use and planning in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is a less than significant impact on the land use and planning in the area.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact on the land use and planning in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the land use and planning in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the land use and planning in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is no impact on the land use and planning in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the land use and planning in the area.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the land use and planning in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the land use and planning in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the land use and planning in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is no impact on the land use and planning in the area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact on the land use and planning in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the land use and planning in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the land use and planning in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the land use and planning the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resolution states that there will be no impact on the environment in the area. It does not mention an impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. The exemption does not specifically mention an impact on the land use and planning in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the land use and planning in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the land use and planning in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is no impact on the land use and planning in the area.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the land use and planning in the area with mitigation measures.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is a less than significant impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the land use and planning in the area.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the land use and planning in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the land use and planning in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is no impact on the land use and planning in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is a less than significant impact on the land use and planning in the area.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution states that there is no impact on the environment. The resolution does not specifically mention an impact on the land use and planning in the area.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is no impact on the land use and planning in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states there is no impact on the environment in the area. It does not specifically state an impact on the land use and planning in the area.

Project ID	Project Name	Environmental Document Summary
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution does not mention an impact on the environment. It also does not mention an impact on the land use and planning in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the land use and planning in the area with mitigation measures.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is no impact on the land use and planning in the area.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the land use and planning in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the land use and planning in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the land use and planning in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the land use and planning in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is no impact on the land use and planning in the area.

6.10.3 Cumulative Impact Evaluation

6.10.3.1 Conflict with Any Applicable Habitat or Natural Community Conservation Plan

Impact: *The project would not contribute to a significant cumulative effect relating to conflicts with a habitat or natural community conservation plan.*

Threshold:	Would the proposed WLC project conflict with any applicable habitat conservation plan or natural community conservation plan?

Cumulative Impact Analysis

Cumulative projects are located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP) areas. Based on a review of each of the potentially cumulative projects, each that would be subject to the MSHCP and/or SKR HCP would be required to pay a fee to sustain the plant and wildlife populations within the MSHCP and the species population in the SKR HCP areas.

Projects subject to the MSHCP are required to pay a fee that will eventually result in an MSHCP Conservation Area in excess of 500,000 acres and focuses on conservation of 146 species including amphibians, reptiles, birds, mammals, invertebrates, and plants. Certain species require additional measures to ensure that the population of the species is sustained. Because each of the cumulative projects within the MSHCP area is required to comply with the provisions of the MSHCP, no significant cumulative impact would result. In addition, since the project also would be required to comply with the MSHCP, the project's incremental impact on the species within the MSHCP would not combine with the incremental impacts of the other cumulative projects to cause or contribute to a significant cumulative impact.

Projects subject to the SKR HCP are required to pay a fee so that the funds can be used to acquire and permanently conserve, maintain and fund the conservation, preservation, restoration and enhancement of SKR occupied habitat. The implementation of the HCP has demonstrated the acquisition of habitat and sustaining the population of the SKR. Therefore, implementation of the cumulative projects would not result in a significant cumulative impact. In addition, because the project also would be subject to the SKR HCP, including the requirement to pay a conservation fee, the project's incremental impact on the SKR program would not combine with the incremental impacts of the other cumulative projects to cause or contribute to a significant cumulative impact.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.10.3.2 Conflict with Applicable Land Use Plans, Policies, or Regulations (Regional)

Impact: *The project would not contribute to potential significant cumulative impacts related to conflicts with regional plans or policies.*

Threshold:	Conflict with any applicable regional land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Cumulative Impact Analysis

Certain goals and policies of regional plans are applicable to certain cumulative projects. The regional plans evaluated in Section 4.10.5.2 of the FEIR included the Riverside County Airport Land Use Plan, the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the SCAG Regional Comprehensive Plan.

Some among the cumulative projects are located within the Airport Land Use Plan (ALUP) for March Air Reserve Base. Those projects are expected to comply with the ALUP regulations; however, there is a possibility that one or more could be inconsistent with the ALUP in a way that results in potential significant cumulative impacts. Because the project is not located within an ALUP, the project would not cause or contribute to any potential cumulative ALUP impact. Therefore, the project would result in no cumulative impacts to ALUP regulations.

The RTP/SCS includes policies that provide a strong commitment to reduce emissions from traffic and transportation. The RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, play, and how they will move around. Many of the cumulative projects include the development of residential uses within the City of Moreno Valley. These projects are expected to be consistent with some of the policies identified in the RTP/SCS; however, cumulatively, the cumulative projects are not assisting in reducing potential commute traffic emissions. Therefore, development of the cumulative projects could result in significant cumulative impacts. With the implementation of the project, approximately 25,000 new jobs would be eventually created, which would nearly double the number of jobs within the City. This increase in jobs would positively affect commute patterns for residents within the City as well as within the region by reducing commuter trips. The project is consistent with the applicable policies of the RTP/SCS. Because the project would be consistent with the applicable RTP/SCS policies, the project would not contribute to any adverse cumulative conflicts associated with the RTP/SCS.

The RCP's overall goal is to reinvigorate the region's economy, avoid social and economic inequities and the geographical dislocation of communities, and to maintain the region's quality of life. Because the applicability of the RCP is to projects of "regional significance," the cumulative projects that include warehousing would be applicable. These warehousing projects would result in the creation of employment opportunities that would assist the City in balancing the current housing rich condition. These cumulative projects could modify commuting patterns to reduce overall vehicle miles travelled. These projects of "regional significance" would be consistent with the RCP and therefore would be less than cumulatively significant. The project is also considered a project of "regional significance." The project's anticipated increase of approximately 25,000 new employment opportunities would also modify commuting patterns so that overall vehicle miles travelled could be reduced. Because the project would be consistent with the policies of the RCP, the project would not contribute to potential adverse cumulative impacts to the implementation of the RCP.

In summary, the project would not contribute to potential adverse cumulative impacts related to the implementation of the policies of the applicable regional plans.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.10.3.3 Conflict with Applicable Land Use Plans, Policies, or Regulations (Local)

Impact: *The project would not contribute to potential significant cumulative conflicts with the City of Moreno Valley General Plan.*

Threshold:	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Cumulative Impact Analysis

Cumulative projects (including MV 4 and MV 24, for example) were consistent with the City's General Plan as they were proposed; others required amendments to the City's General Plan to become compliant. Based on a review of the available environmental documents for the cumulative projects that included an amendment, the amended land uses were still consistent with the goals, policies and objectives of the City's General Plan. The cumulative projects resulted in less than significant environmental effects related to the City's General Plan land use goals, policies and objectives.

As stated in Section 4.10.5.3 of the FEIR, the project included amendments to the General Plan; however, in November 2015, the City adopted the proposed amendments submitted through the initiative process. Even prior to the adoption, the FEIR identified that the project was consistent with the goals, policies and objectives of the General Plan. Therefore, the project would not contribute to any potential cumulative impacts relating to consistency with the City of Moreno Valley General Plan.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.10.3.4 Physically Divide an Established Community

Impact: *The project's contribution to cumulative impacts related to physically dividing the established existing rural residences on the project site would be cumulatively considerable.*

Threshold:	Would the proposed WLC project physically divide an established community?

Cumulative Impact Analysis

A few of the cumulative projects are proposed adjacent to the project site, primarily including residential uses but also including two warehouse uses along SR-60. The area primarily west of Redlands Boulevard includes residential uses as well as vacant land that is designated for residential uses in the City of Moreno Valley General Plan. These cumulative projects would not contribute to project's physical division of the established rural residential uses located on the project site. Because cumulative impacts include the effects of the project in combination with other cumulative projects and the project, as discussed below, would result in a significant physical division of the established onsite residences, there would be a significant cumulative impact. The project's contribution to this significant cumulative impact would be cumulatively considerable.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Because the project's physical division of the established onsite rural residences would be exacerbated by the incremental impacts of adjacent projects in the cumulative scenario, the determination in Section 4.10.6.1 of the Final EIR that there is no effective mitigation available to protect or separate these existing residences from future warehousing buildings and operations is equally applicable to the cumulative condition.

Significance Level After Mitigation: Cumulatively considerable contribution to a significant cumulative impact. Because there is no effective means of reducing the significant impact related to physically dividing the established onsite rural residences, this cumulative impact would be significant and unavoidable.

6.11 Mineral Resources

Pursuant to CEQA Guidelines §15130, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.” Because the proposed project would result in no impact related to the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, it could not cause or contribute to any potential cumulative impact in either respect.

6.12 Noise

Cumulative effects to noise are described in this section. A summary of the project's potential impacts to noise issues is provided in Section 6.12.1. The cumulative impact geographic area for noise issues is provided in Section 6.12.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the noise issues are discussed in Section 6.12.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.12.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the city will fully build out by 2040, the cumulative impact analysis assumes worse case cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Figures 6.12-1 and 6.12-2 and Tables 6.12-1 and 6.12-2 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they would contribute to a cumulatively considerable impact to noise. These potentially cumulative impacts are documented in the following section.

6.12.1 Project Impact Findings

The project's effects to noise are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.12 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

- Expose people to or cause generation of noise levels in excess of standards established in the City of Moreno Valley General Plan, Moreno Valley Municipal Code, or applicable standards of other agencies; **Significant and Unavoidable, Section 4.12.6.1; Less than Significant, Section 4.12.6.3**
- Exposure people to or cause generation of excessive groundborne vibration or groundborne noise levels; **Less than Significant, Section 4.12.5.1.**
- A substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project; **Significant and Unavoidable with Mitigation, Section 4.12.6.1; Significant and Unavoidable, Section 4.12.6.2.**
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; **No Impact, Section 4.12.5.2.**
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels. **No Impact, Section 4.12.5.2.**

The standards within the *City of Moreno Valley General Plan* and *Moreno Valley Municipal Code* determine the acceptable noise environment for project and its vicinity. The standards are as follows:

- To the extent feasible, ensure through the design review process that exterior noise levels at commercial and industrial areas do not exceed 65 dBA CNEL.
- Consider the following uses noise-sensitive and discourage them in areas where exterior noise levels exceed 65 dBA CNEL unless measures are implemented that reduce the noise exposure below this level: single-family and multiple-family residential uses, group homes, hospitals, schools and other learning institutions, and parks and open space areas where quiet is a basis for use.

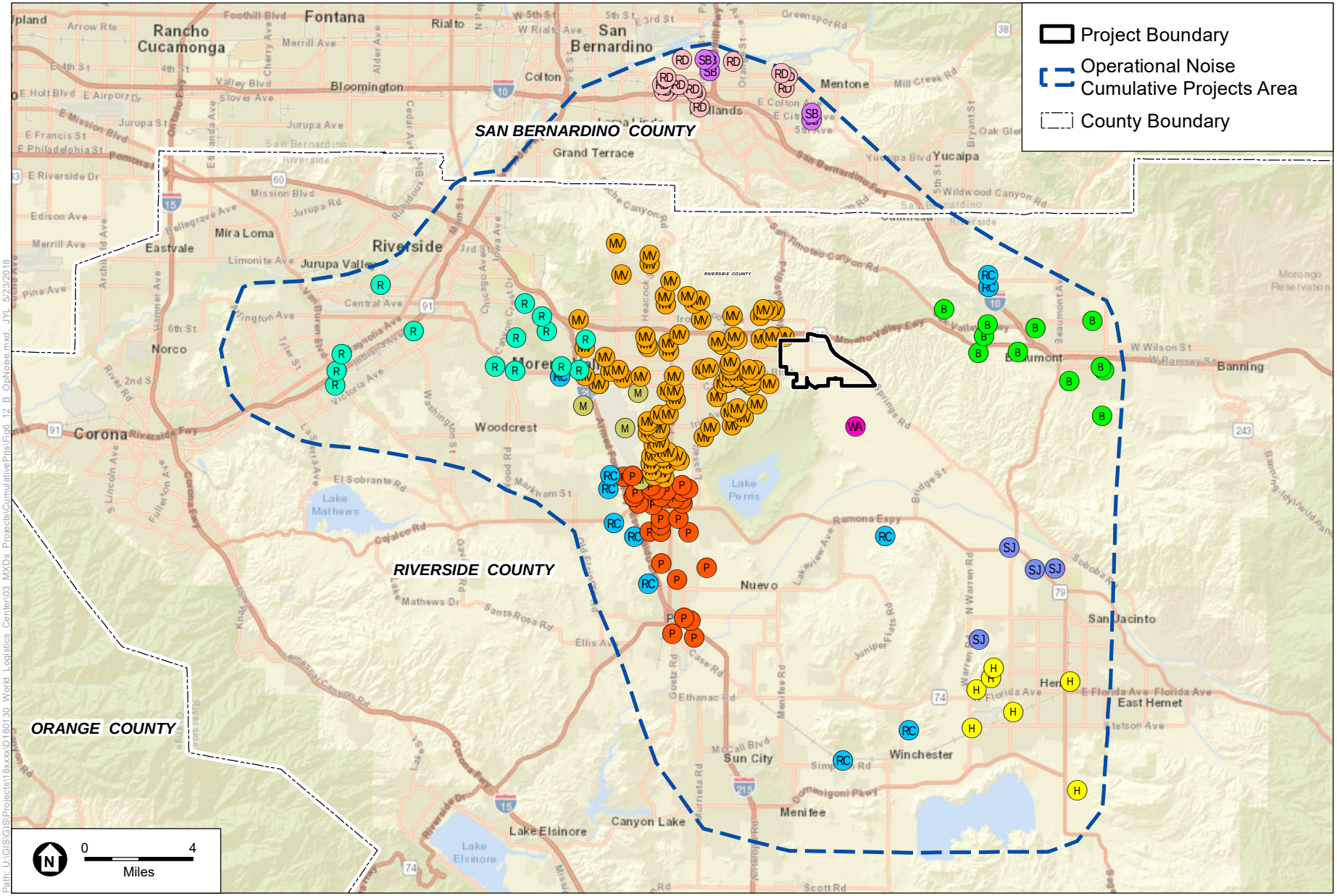
The project's incremental contribution to a cumulative traffic noise increase would be considered cumulatively considerable and significant when ambient noise levels affect noise-sensitive land uses and when project traffic increases noise levels by 1 dB or more over existing pre-project conditions and the predicted future cumulative with project traffic noise levels cause the following cumulative increases:

- Increase noise levels by 5 dB or more where the existing noise level is less than 60 CNEL;
- Increase noise levels by 3 dB or more where the existing noise level is 60 to 65 CNEL; or
- Increase noise levels by 1.5 dB or more where the existing noise level is greater than 65 CNEL.

6.12.2 Geographic and Temporal Scope

Cumulative impacts to noise could result from the project in conjunction with other past, present and future projects located within two cumulative impact project areas: 1) the cumulative traffic noise impact project boundary (this area includes the entire City of Moreno Valley and portions of the Cities of Riverside, Redlands, Beaumont, Perris, San Jacinto, Hemet and Calimesa, as well as portions of unincorporated Riverside and San Bernardino County and the March JPA), and: 2) 500' from the proposed limits of construction for cumulative construction impact projects. The cumulative traffic noise impact area is based on the cumulative traffic impact area where past, present, and future projects contribute 50 average daily trips (ADT) or more to the roadway network and therefore to the traffic noise environment. Construction noise and vibration impacts are limited to the immediate area of construction activity. Therefore, the geographic scope of cumulative construction noise impacts encompass cumulative projects located within 500' of the project boundary.

Cumulative projects within the identified operational and construction noise areas will be evaluated with the project to determine if any cumulative impact would occur. The geographic area for cumulative construction noise impacts is shown on Figure 6.12-1. Cumulative operational noise impacts is shown on Figure 6.12-2. There are no projects with CEQA documents located within the cumulative construction noise impact area, although the cumulative projects identified within the cumulative construction noise impact area have been evaluated in this section. The projects located within the cumulative operational noise impact area are listed in Table 6.12.



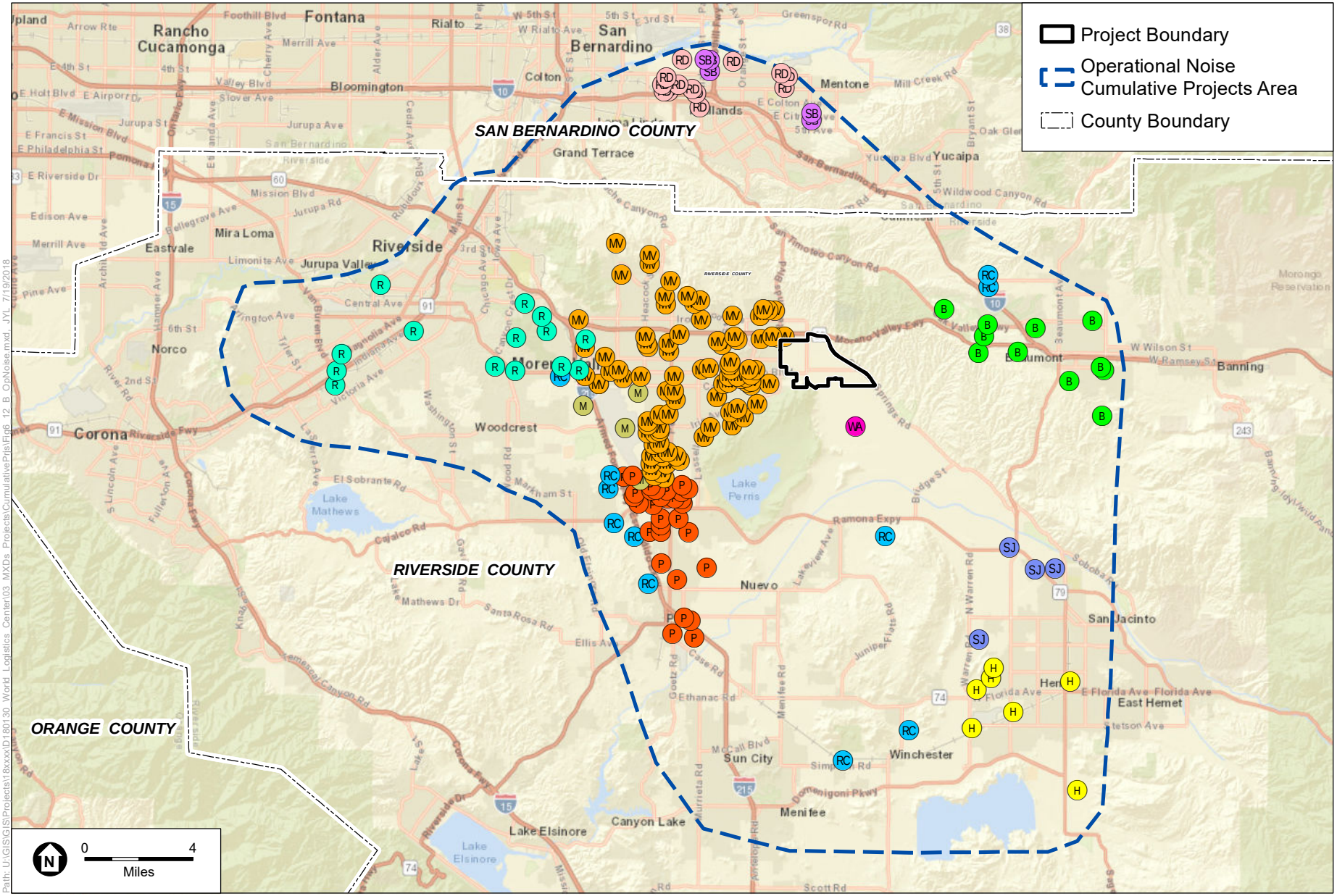
SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.12-1

Operational Noise Cumulative Projects Area

ESA



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.12-2

Operational Noise Cumulative Projects Area

ESA

Table 6.12-1: Noise Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. There is a less than significant impact on the noise in the area with mitigation measures.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. There will be a significant impact on the noise in the area despite mitigation measures.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park. There will be a less than significant impact on the noise in the area with mitigation measures.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. In the short term, there is an unavoidable impact on the noise in the area from construction. The long term noise will have a less than significant impact on the noise in the area with mitigation measures.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. There will be a less than significant impact on the noise in the area with mitigation measures.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. There is no impact on the noise in the area.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. There is a less than significant impact on the noise in the area with mitigation measures.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The EIR does not mention if there will be an impact on the noise in the area.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. There is no impact on the noise in the area.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. There is a potentially significant impact on the noise in the area.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. The excerpt does not contain information on the impact on noise in the area.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. There is a less than significant impact on the noise in the area with mitigation measures.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. There is a less than significant impact on the noise in the area.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The EIR does not mention an impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. There is a less than significant impact on the noise in the area with mitigation measures.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR , the project would result in the development of a 130 acre business park. There is a less than significant impact on the noise in the area with mitigation measures.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. There is a significant and unavoidable impact on noise in the area.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. There is no impact on the noise in the area.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. There is no impact on the noise in the area.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. There is a less than significant impact on the noise in the area with mitigation measures.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. There is a less than significant impact on the noise in the area with mitigation measures.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. There is no impact on the noise in the area.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. There is no impact on the noise in the area.
MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. There is no impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. There is no impact on the noise in the area.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. There is no impact on the noise in the area.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. There is no impact on the noise in the area.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. There is no impact on the noise in the area.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. There is no impact on the noise in the area.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. There is no impact on the noise in the area.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. There is no impact on the noise in the area.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. There is no impact on the noise in the area.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. There is no impact on the noise in the area.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. There is no impact on the noise in the area. There is no impact on the noise in the area.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. There is a less than significant impact on the noise in the area.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. There is a less than significant impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. There is no impact on the noise in the area.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. There is no impact on the noise in the area.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. There is no impact on the noise in the area.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. There is no impact on the noise in the area.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. There is no impact on the noise in the area.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. There is no impact on the noise in the area.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. There is no impact on the noise in the area.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. There is no impact on the noise in the area.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. There is no impact on the noise in the area.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. There is no impact on the noise in the area.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. There is a less than significant impact on the noise in the area with mitigation measures.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. There is a less than significant impact on the noise in the area with mitigation measures.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. There is a significant impact to the noise in the area.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. There is no impact on the noise in the area.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. There is a significant and unavoidable direct and cumulative impact (near-term) on the noise in the area.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. There is no impact on the noise in the area.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact. The resolution does not specifically mention an impact on noise in the area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. There is a less than significant impact on the noise in the area with mitigation measures.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. There is no impact on the noise in the area.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. There is no impact on the noise in the area.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. There is a less than significant impact on the noise in the area with mitigation measures.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. There is a less than significant impact on the noise in the area.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. There is a less than significant impact on the noise in the area with mitigation measures.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines. The resolution does not specifically mention an impact on the noise in the area.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. There is no impact on the noise in the area.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The resolution states that the project will not cause an impact on the environment. It does not mention an impact on the noise in the area.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. There is no impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. There is no impact on the noise in the area.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. There is a less than significant impact on the noise in the area.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. There is a less than significant impact on the noise in the area.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. There is no impact on the noise in the area.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. There is no impact on the noise in the area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. There is a less than significant impact on the noise in the area.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the noise in the area.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. There is no impact on the noise in the area.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. There is no impact on the noise in the area.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. There is no impact on the noise in the area.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. There is a less than significant impact on the noise in the area.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. There is a less than significant impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. There is no impact on the noise in the area.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. There is no impact on the noise in the area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. There is no impact on the noise in the area.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. There is no impact on the noise in the area.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres. The resolution states that there will be no significant impact on the environment. It does not mention an impact on the noise in the area.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts. It does not specifically mention an impact on noise in the area.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. There is no impact on the noise in the area.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. There is no impact on the noise in the area.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. There is a less than significant impact on the noise in the area with mitigation measures.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. There is a less than significant impact on the noise in the area with mitigation measures.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. There is no impact on the noise in the area.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. There is no impact on the noise in the area.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. There is no impact on the noise in the area.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. There is a less than significant impact on the noise in the area.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. There is a less than significant impact on the noise in the area.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The resolution states that there would be impact on the environment. It does not mention an impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. There is a less than significant impact on the noise in the area.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The resolution states that there will be no impact on the environment. It does not mention an impact on noise in the area.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. The resolution does not mention whether or not there would be an impact on the environment, including noise, in the area.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. There is a less than significant impact on the noise in the area with mitigation measures.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. There is a less than significant impact on the noise in the area with mitigation measures.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. There is no impact on the noise in the area.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. There is no impact on the noise in the area.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. There is no impact on the noise in the area.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. There is no impact on the noise in the area.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. There is no impact on the noise in the area.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. There is no impact on the noise in the area.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. There is a potentially significant impact on the noise in the area.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. There is a less than significant impact on the noise in the area with mitigation measures.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. There is a less than significant impact on the noise in the area with mitigation measures.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. There is a less than significant impact on the noise in the area with mitigation measures.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. There is no impact on the noise in the area.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The excerpt does not mention an impact on the noise in the area.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. There is a less than significant impact on the noise in the area with mitigation measures.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. There is a less than significant impact on the noise in the area with mitigation measures.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. There is a less than significant impact on the noise in the area.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. There is a less than significant impact on the noise in the area.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. There is a potentially significant impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. There is a less than significant impact on the noise in the area with mitigation measures.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. There is a potentially significant impact on the noise in the area.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. There is a less than significant impact on the noise in the area with mitigation measures.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. There is a less than significant impact on the noise in the area with mitigation measures.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. There is a potentially significant impact on the noise in the area.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. There is a less than significant impact on the noise in the area with mitigation measures.
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. There is a less than significant impact on the noise in the area.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. There is a less than significant impact on the noise in the area.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. There is a significant and unavoidable impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. There is a less than significant impact on the noise in the area with mitigation measures.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. There is a less than significant impact on the noise in the area with mitigation measures.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. There is a less than significant impact on the noise in the area with mitigation measures.
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area. There is a significant impact on the noise in the area.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. There is a significant and unavoidable impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The slides do not mention an impact on the noise in the area.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. There is a less than significant impact on the noise in the area.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. There is a less than significant impact on the noise in the area with mitigation measures.
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. There is no impact on the noise in the area.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. The response to comments do not mention an impact on the noise in the area.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. There is potentially significant impact on the noise in the area.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. There is a less than significant impact on the noise in the area.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. There is a less than significant impact on the noise in the area.
RD-1	Tract 18988	Per the City of Redlands' June 2015 MND, the project would widen Pioneer Avenue to preserve existing deodar cedar trees along an approximately 1,100 linear foot segment between Texas Street and Furlow Drive. The project also would develop 82 single-family residential lots on 30.51 acres. There is a less than significant impact on the noise in the area with mitigation measures.
RD-3	Newland Homes Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the construction of 105 single family detached dwelling units and a neighborhood park on 39.84 acres. There is a less than significant impact on the noise in the area with mitigation measures.
RD-4	Redlands Pennsylvania Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the subdivision of a 24.87 acre project site into 67 residential lots and 10 lots as open space. Additionally, the Project seeks approval to remove 5 acres from an Agricultural Preserve. There is a less than significant impact on the noise in the area.
RD-6	Woodsprings Hotel	Per the City of Redlands' March 2018 IS, the Project would result in the construction of a 124-room hotel on a 2.68-acre property. There is a less than significant impact on the noise in the area.
RD-10	Park Ave Industrial Center	Per the City of Redlands' March 2014 MND, the project would develop approximately 170,000 square feet of light industrial uses, including 289 parking spaces and 12, 500 square feet of office space. There is a less than significant impact on the noise in the area with mitigation measures.
RD-11	Marriott Springhill Suites	Per the August 2016 technical memorandum regarding the Trip Generation, Distribution, and Assignment Analysis for the project, the project would develop a four-story 88-room hotel with rooms, suites, and 97 parking spaces. There is a less than significant impact on the noise in the area.

Project ID	Project Name	Environmental Document Summary
RD-12	I-10 Redlands LC - B	Per the August 2014 letter responding to comments on the proposed MND, the project would develop approximately 1.1 million square feet for warehousing/ fulfillment/distribution center uses on 50.67 acres. There is a less than significant impact on the noise in the area.
RD-14	Redlands DC 772,000 SF (2015)	Per the City of Redlands' September 2013 MND, the project would develop 771,839 square feet of warehouse distribution center on 35.59 acres and related parking. There is a less than significant impact on the noise in the area.
RD-16	APL Logistics	Per the May 2012 City of Redlands Commission Review and Approval No. 873, the project would develop 809,338 square feet of warehouse uses on 37.4 acres. There is a less than significant impact on the noise in the area with mitigation measures.
SB-1	Redlands Gateway Logistics - B	Per the County of San Bernardino's 2009 IS, the project would result in the construction of 5 two-story structures and 7 single-story structures with a maximum floor area of 216,500 square feet, and a three-story hotel with 180 rooms and a floor area of 80,000 square feet. There is a less than significant impact on the noise in the area.
SB-2	Redlands Gateway Logistics - A	Per the County of San Bernardino's 2014 IS, the project proposes to subdivide 42.66 acres into 2 lots. Parcel 1 is 14.81 acres and Parcel 2 is 27.85. There is a less than significant impact on the noise in the area with mitigation measures.
SB-3	Prologis #12	Per the County of San Bernardino's 2013 IS, the project would result in a conditional use permit to establish a 593,916 square-foot industrial building to be use as a "high cube" warehouse distribution facility, a tentative parcel map for a one lot subdivision, and a general plan amendment to change the official land use district from East Valley/General commercial to East Valley/regional industrial on 27.42 acres. There is a less than significant impact on the noise in the area.
SB-4	Prologis #17	Per the County of San Bernardino's April 2014 MND, the Project would result in the construction of a 777,620 square foot industrial building and the relocation of an existing telecommunication tower on a 35.98 acre site. There is a less than significant impact on the noise in the area.
SB-6	Prologis #8	Per the County of San Bernardino's 2007 IS, the project would result in the construction four industrial buildings to be used a "High Cube" and general warehouse distribution facilities. There is a less than significant impact on the noise in the area.
SB-7	Sam Redlands Tract	Per the City of Redlands' March 2017 ISMND, the Project would result in the subdivision of an 11.97 acre site into 34 single family residential lots, 4 lettered lots, and the demolition of existing structures. There is a less than significant impact on the noise in the area with mitigation measures.

Project ID	Project Name	Environmental Document Summary
SB-8	Jacinto Tract	Per the City of Redlands' July 2016 ISMND, the Project would result in the subdivision of an 18.54 acre site into 40 residential lots. There is a less than significant impact on the noise in the area.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. There is no impact on the noise in the area.

6.12.3 Cumulative Impact Evaluation

6.12.3.1 Groundborne Vibration Impacts

Impact: *The project's contribution to the cumulative exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than cumulatively considerable.*

Threshold:	Could the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Cumulative Impact Analysis

Construction of the Project would generate ground-borne construction vibration during site clearing, grading and shoring activities. Project construction would generate varying degrees of ground vibration, depending on the construction procedures and the construction equipment used. The construction activities that typically generate the most severe vibrations, such as blasting and impact pile driving, would not occur for the Project. As discussed in Section 4.12.5.1, construction activities are not anticipated to generate perceptible vibration velocities. Therefore, impacts would be less than significant.

Two cumulative projects are located at distances that could undergo construction activities during the project's 16-year construction period: P06-158/Gascon and MV-6: Highland Fairview Corporate Park, and MV-126: TTM 33222. Due to the rapid attenuation characteristics of ground-borne vibration and distance from each of the Related Projects to the project site, there is no potential for cumulative construction impacts with respect to ground-borne vibration. Therefore, cumulative impacts would be less than significant.

The project's operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, condenser units, and exhaust fans, which would produce vibration. In addition, the primary sources of transient vibration would include truck circulation within the proposed parking areas and internal drive aisles. Ground-borne vibration generated by each of the above-mentioned activities would generate up to approximately 0.005 in/sec at 50 feet from the source.[1] The potential vibration levels from all Project operational sources at the closest existing sensitive receptor locations would be less than the significance threshold of 0.5 in/sec PPV significance threshold for potential residential building damage and 0.1 in/sec PPV significance threshold for human annoyance. As such, vibration

1 This vibration estimate is based on data presented in the USDOT Federal Transit Administration, 2006.

impacts associated with operation of the project would be below the significance threshold and would not be cumulatively considerable.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.12.3.2 Airport Noise Impacts

Impact: *The project is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. No significant impacts would occur.*

Threshold:	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, results in exposure of people residing or working in the project area to excessive noise levels. For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Cumulative Impact Analysis

The project is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. The project area is located approximately 5.5 miles northeast of March Airfield (MAF) and is not located within two miles of a private airstrip. MAF is a joint-use airport, used for both military and civilian purposes. March Air Reserve Base (MARB) is the military operator of MAF and March Inland Port (MIP) is the civilian operator of the airport. This facility is anticipated to play an increasingly important role in the transportation of goods and cargo for the Southern California region. Existing flight patterns affect a large portion of the City of Moreno Valley, along a path that affects the western portion of the City in a northwest/southeast alignment. Aircraft operations from the airport currently contribute intermittent single-event noise.

There is potential for single-event noise exposure levels from MAF activity to affect the project. The exposure levels will vary dependent upon the type of aircraft and flight track flown for each operation at MAF. However, the project is not identified as being within the noise or safety contours delineated for MARB Airport and is not subject to Airport Land Use Commission (ALUC) compatibility analyses.[2] In addition, the project is not considered to contain sensitive receivers and, therefore, the impacts from these single-event noise levels are considered to be below the level of significance. The City's exterior noise standard for industrial uses is 70 dBA CNEL. MAF noise levels are less than 60 dB CNEL within the project area. Therefore, the project would not have the potential to expose people to excessive noise levels from airport operations. Therefore, less than significant noise impacts would occur regarding these issues from implementation of the project.

Significance Level Before Mitigation: No impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: No impact.

6.12.3.3 Short-term Construction Noise Impacts

Impact: *The project's contribution to short-term construction noise levels in the project vicinity is cumulatively considerable.*

[2] *Figure 5.4-1 March Reserve Air Base Noise Impact Area*, City of Moreno Valley General Plan EIR, July 2006.

Threshold:	Would the project result in a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Cumulative Impact Analysis

Construction crew commutes and the transport of construction equipment, and materials to the WLCSP area would incrementally increase noise levels on access roads leading to the site. Secondary sources of noise would include noise generated during excavation, grading, and building erection on the project site. The net increase in project site noise levels generated by these activities and other sources has been quantitatively estimated and compared to the applicable noise standards and thresholds of significance. Three cumulative projects are located at distances that could undergo construction activities during the project's 16-year construction period: MV-5: P06-158/Gascon, MV-6: Highland Fairview Corporate Park, and MV-126: TTM 33222. Construction of the western portion of the project would result in significant and unavoidable impacts. Should any of these three cumulative projects undergo construction while the western portion of the project is under construction, cumulative construction noise impacts would occur, potentially exposing sensitive receptors to cumulative construction noise greater than that experienced from project construction alone. Therefore, project construction would result in cumulatively considerable and potentially significant cumulative noise impacts.

The three cumulative construction projects do not have CEQA documents in which construction noise has been analyzed. Therefore, assuming that construction of Related Projects would consist of similar construction activity and equipment as the project, receptors located nearest both the project and each of the related projects could potentially be exposed to noise level increase of 10.1 dBA L_{eq} and 44.4 dBA L_{eq} as summarized in Table 6.12-2.

Table 6.12-2: Cumulative Construction Noise Impacts - Unmitigated

Related Project	Distance of Nearest Receptor[1] (feet)	Distance of Receptor to Project	Combined Construction Noise Level (dBA Leq) [2]	Existing Ambient (dBA Leq) [3]	Construction Plus Ambient (dBA Leq)	Increase over Ambient (dBA Leq)
MV-5	600	120	79.2	69.6	79.7	10.1
MV-6	600	120	79.7	69.6	79.7	10.1
MV-126	25	25	96.0	51.6	96.0	44.4

Notes:
* Noise levels are added logarithmically.
1 Distance to nearest receptor south of SR-60.
2 Assumes unmitigated project construction noise levels shown in Table 4.12.K and unmitigated construction noise levels for Related Projects.
3 See Table 4.12-1

Significance Level Before Mitigation: Significant impact

Mitigation Measures: As indicated in Section 4.12.6.1, construction noise impacts have been identified and **Mitigation Measure 4.12.6.1A** has presented to reduce construction noise impacts to the greatest extent feasible.

Significance Level After Mitigation: Implementation of Mitigation Measure 4.12.6.1A would reduce construction noise levels at nearby sensitive receptors through implementation of a NRCP, which is expected to attenuate construction noise levels by 10 dB and prohibit construction activities within 800 feet of residences during nighttime hours. A distance of 800 feet is the point at which any project-related construction activity is not expected to exceed the City of Moreno Valley's nighttime noise standard of 55 dBA L_{eq}. As shown in Section 4.12, Table 4.12-8 and Table 4.12-9, even with implementation of Mitigation Measure 4.12.6.1A, sensitive receptors located near on-site and off-site construction areas would be exposed to construction noise levels that would elevate the existing ambient noise levels above the applied 10 dB substantial temporary increase threshold. As shown in Table 6.12-3, with implementation of mitigation measures to project construction noise levels, cumulative construction noise at sensitive

receptors nearest Related Project MV-126 is expected to remain significant and unavoidable. Therefore, this would result in a significant and unavoidable cumulative impact with mitigation.

Table 6.12-3: Cumulative Construction Noise Impacts – Mitigated Project

Related Project	Distance of Nearest Receptor[1] (feet)	Distance of Receptor to Project	Combined Construction Noise Level (dBA Leq) [2]	Existing Ambient (dBA Leq) [3]	Construction Plus Ambient (dBA Leq)	Increase over Ambient (dBA Leq)
MV-5	600	120	70.5	69.6	73.1	3.5
MV-6	600	120	70.5	69.6	73.1	3.5
MV-126	25	25	93.4	51.6	93.4	41.8

Notes:
* Noise levels are added logarithmically.
1 Distance to nearest receptor south of SR-60.
2 Assumes mitigated project construction noise levels shown in Table 4.12-8 and unmitigated construction noise levels for Related Projects.
3 See Table 4.12-1.

Significance Level After Mitigation: Significant impact.

6.12.3.4 Long-term Traffic Noise Impacts

Impact: *The project's contribution to long-term traffic noise levels in the project vicinity is cumulatively considerable.*

Threshold:	Would the project result in a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Cumulative Impact Analysis

Cumulative traffic volumes contained in the TIA were developed for the Future Year 2025 and Buildout 2040 analysis time horizons. Traffic volumes for each time horizon were developed utilizing a combination of various future traffic growth methods as follows. For Future Year 2025, traffic volumes were developed by interpolating year 2040 traffic volume projections from the Riverside County Transportation and Analysis Model (RivTAM) to year 2025 plus traffic from a list of past, present, and reasonably foreseeable projects (see Table 6.12B). For Buildout Year 2040, traffic volumes were developed by utilizing the year 2040 traffic volume projections from the RivTAM plus traffic from a list of past, present, and reasonably foreseeable projects.

Three hundred and thirty-nine (339) roadway links and eighty-nine (89) freeway segments were analyzed in the noise analysis. The change in noise level was calculated for all 428 roadway and freeway links with and without the project for the existing case (2018), 2025, and 2040 buildout scenarios. Segments with noise increases less than 1.5 dB would not have a substantial noise increase and were not presented in the main body of the noise report (i.e., the tables and figures). Similarly, any segments that do not have sensitive receptors (e.g., residential uses) were also not presented in the main body of the noise report. Based on this filtering process, of the 428 segments analyzed, 21 segments have sensitive receptors and an increase of 1.5 dB for at least one buildout scenario analyzed in Section 4.12 and were therefore addressed in the analysis. Evaluation of all other segments is included in Appendix D of this Revised FEIR.

Cumulative noise impacts associated with roadway noise have been addressed based on the cumulative traffic volumes, analyzing the difference between future plus project traffic noise and existing without project traffic noise to account for cumulative projects as well as ambient growth as a worst-case scenario. Table 6.12-4 provides a comparison of Future Year 2025 with project noise levels and Existing Conditions and if a significant impact (project-specific or cumulatively significant) occurs. Table 6.12-5 provides a comparison of Buildout Year 2040 with project noise levels and Existing Conditions and if a significant impact (project-specific or cumulatively significant) occurs.

Table 6.12-4: Cumulative Impact for Phase 1 (2025) Plus Project Traffic Noise Levels (dBA)

Roadway Segment	CNEL (dBA) at 100 feet			
	Existing	Phase I (2025) Plus Project	Cumulative Increment (Project Contribution)	Substantial Increase?
World Logistics Center Pkwy (Eucalyptus Avenue to Street F)	52.6	69.5	16.9	Yes
Alessandro Boulevard (Cactus Avenue Extension to World Logistics Center Pkwy)	51.9	63.5	11.6	Yes
Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue)	0.0	63.9	63.9	Yes
John F Kennedy Drive (south of Cactus Avenue)	63.8	65.5	1.7	No
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	65.6	67.6	2.0	Yes
Street F (east of World Logistics Center Parkway)	0.0	58.1	58.1	Yes
Cactus Avenue (west of Redlands Boulevard)	60.2	61.4	1.2	No
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	50.7	54.3	3.6	No
Theodore Street (SR-60 to Ironwood Avenue)	59.6	60.5	0.9	No
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	60.4	62.1	1.7	No
Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension)	51.9	63.5	11.6	Yes
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	42.1	47.2	5.1	Yes
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	54.6	56.2	1.6	No
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	54.1	55.0	0.9	No
Kitching Street (Krameria Avenue to Lurin Avenue)	61.9	64.9	3.0	Yes
Sunset Drive (Crown Street to Alessandro Road)	47.4	49.0	1.6	No
SR-60 EB Ramps (SR-60 to Central Avenue)	57.4	65.5	8.1	Yes
Freeways				
SR-60 (Perris Boulevard to Nason Street)	80.1	81.6	1.5	Yes
SR-60 (Moreno Beach Drive to Redlands Boulevard)	77.9	80.4	2.5	Yes
SR-215 (Mill Street to 2nd Street)	82.9	83.1	0.2	No
SR-215 (Baseline Road to Highland Avenue/SR-210	80.4	80.6	0.2	No

Source: ESA, 2018

As identified in Table 6.12-4, implementation of the proposed WLC project would contribute to cumulative changes in traffic noise levels in Year 2025 (Phase I). The largest project-related increase in traffic noise would be along Street D/Cactus Avenue Extension (Alessandro Avenue to Cactus Avenue) and along Street F (east of World Logistics Center Parkway), where increases of 63.9 dBA and 58.1 dBA, respectively, are predicted for the 2025 With Project Phase 1 scenario over the 2018 Existing Conditions scenario. However, the increases associated with these roadway segments is attributable in part to Street D/Cactus Avenue Extension and Street F being new roads that will be constructed by the project through open space areas that are currently vacant and don't contribute to the overall ambient noise environment. A total of eleven road segments would result in a substantial noise increase attributable to the project, resulting in a significant cumulative impact requiring mitigation.

Table 6.12-5: Cumulative Impact for Buildout (2040) Plus Project Traffic Noise Levels (dBA)

Roadway Segment	CNEL (dBA) at 100 feet			
	Existing	Buildout (2040) Plus Project	Cumulative Increment (Project Contribution)	Substantial Increase?
World Logistics Center Pkwy (Eucalyptus Avenue to Street F)	52.6	71.0	18.4	Yes
Alessandro Boulevard (Cactus Avenue Extension to World Logistics Center Pkwy)	51.9	66.7	14.8	Yes
Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue)	0.0	66.8	66.8	Yes
John F Kennedy Drive (south of Cactus Avenue)	63.8	67.0	3.2	Yes
Redlands Boulevard (SR-60 to Eucalyptus Avenue)	65.6	69.2	3.6	Yes
Street F (east of World Logistics Center Parkway)	0.0	68.3	68.3	Yes
Cactus Avenue (west of Redlands Boulevard)	60.2	64.9	4.7	Yes
Ironwood Avenue (Redlands Boulevard to Highland Boulevard)	50.7	58.2	7.5	Yes
Theodore Street (SR-60 to Ironwood Avenue)	59.6	66.0	6.4	Yes
Ironwood Avenue (Moreno Beach Drive to Redlands Boulevard)	60.4	64.6	4.2	Yes
Cactus Avenue (Redlands Boulevard to Cactus Avenue Extension)	51.9	66.7	14.8	Yes
Locust Avenue (Moreno Beach Drive to Smiley Boulevard)	42.1	61.3	19.2	Yes
Locust Avenue (Moreno Beach Drive to Redlands Boulevard)	54.6	60.9	6.3	Yes
Moreno Beach Drive (Locust Avenue to Ironwood Avenue)	54.1	63.0	8.9	Yes
Kitching Street (Krameria Avenue to Lurin Avenue)	61.9	68.4	6.5	Yes
Sunset Drive (Crown Street to Alessandro Road)	47.4	49.0	1.6	Yes
SR-60 EB Ramps (SR-60 to Central Avenue)	57.4	66.5	9.1	Yes
Freeways				
SR-60 (Perris Boulevard to Nason Street)	80.1	82.4	2.3	Yes
SR-60 (Moreno Beach Drive to Redlands Boulevard)	77.9	81.6	3.7	Yes
SR-215 (Mill Street to 2nd Street)	82.9	84.8	1.9	Yes
SR-215 (Baseline Road to Highland Avenue/SR-210	80.4	82.1	1.7	Yes

Increases in noise levels associated with Buildout Year (2040) traffic conditions on area roadways range up to 68.3 dBA. As identified in the Table 6.12-6, the greatest increase in noise levels would be along Street D/Cactus Avenue Extension (Alessandro Boulevard to Cactus Avenue) and along Street F (east of World Logistics Center Parkway), where increases of 66.8 dBA and 68.3 dBA, respectively, are predicted for the Buildout Year 2040 With Project scenario over the 2018 Existing Conditions scenario. However, the increases associated with these roadway segments is attributable in part to Cactus Avenue Extension and Street F, being new roads that will be constructed by the project through open space areas that are currently vacant and don't contribute to the overall ambient noise environment. A total of twenty-one road and freeway segments would result in a substantial noise increase attributable to the project, resulting in a significant impact requiring mitigation.

The project calls for improvements to several of the roadways around the project area in order to accommodate the projected increase in project traffic volumes. The presence of residential uses occurs within the WLCSP project and nearby area. These roadway segments are analyzed against the thresholds

for determining significant impacts defined previously in Section 4.12.6.2. As described previously in Section 4.12.4, the project's incremental contribution to a cumulative noise increase would be considered cumulatively considerable and significant when ambient noise levels affect noise-sensitive land uses and when the project increases noise levels by 1 dB or more over pre-project conditions and the predicted future cumulative with project noise levels cause the following cumulative increases:

- Increase noise levels by 5 dB or more where the existing noise level is less than 60 CNEL;
- Increase noise levels by 3 dB or more where the existing noise level is 60 to 65 CNEL; or
- Increase noise levels by 1.5 dB or more where the existing noise level is greater than 65 CNEL.

Cumulative noise impacts associated with roadway noise have been addressed based on the 2025 and 2040 time horizons analyses for the roadway segments identified for analysis in Section 4.12. Table 6.12-5 and Table 6.12-6 show the Future Year 2025 and Buildout 2040, respectively, CNEL values with the project and if a substantial increase would be produced based on the cumulatively significant significance criteria identified above. Traffic noise level increases from the existing baseline condition and the future (2025 and 2040) time horizons are attributable to the intermingled effects of both the cumulative (i.e., past, present, and reasonably foreseeable projects) development projects in the project vicinity and region as well as the project.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: As indicated in Section 4.12.6.2, roadway noise impacts have been identified and **Mitigation Measures 4.12.6.2A** through **4.12.62D** have been presented to reduce roadway noise impacts to the greatest extent feasible.

Significance Level After Mitigation: Significant impact. As disclosed in Section 4.12.6.2, there are numerous instances in which there is no feasible means to reduce roadway noise impacts because of the existing developed nature of the affected roadway segment and/or the scattered nature of the sensitive receptors (i.e., residences), which prohibits the effectiveness of a soundwall. For those segments at which there is a cumulatively considerable impact and there is no feasible means to provide mitigation, the significant cumulative impact will remain significant and unavoidable.

6.12.3.5 Long-term Operational Noise Impacts

Impact: *The project's contribution to the cumulative exposure of persons to long-term operational noise would not be cumulatively considerable.*

Threshold:	Would the project cause exposure of persons to or generation of noise levels in excess of standards established in the City of Moreno Valley General Plan, Moreno Valley Municipal Code, or applicable standards of other agencies?

Cumulative Impact Analysis

On-site operational noises are individual noise occurrences and are not typically additive in nature. It is extremely unlikely that adjacent properties will generate noises that would be additive in nature because of two important reasons. First, the noise sources would have to be adjacent or in close proximity to one another in order for the noises to intermingle. Second, the sensitive receptor or receptors would also have to be adjacent to or in close proximity to the noise generators. Because the project assumes 24-hour operations, it is conservatively assumed that the geographic limit for cumulative on-site operational noise would include the three cumulative projects located adjacent to the project site. Cumulative project MV-126 consists of residential uses and would therefore not generate noise levels equivalent to the project. Assuming that the remaining two cumulative projects (MV-5 and MV-6) would generate noise at the same time as the project and at distances and levels that would be additive in nature, a significant cumulative noise impact at sensitive receptors could occur.

As discussed in Section 4.12.6.3 of the FEIR, on-site operational activity would include noise from truck delivery, loading/unloading activities at the loading areas, heating, ventilation, and air-conditioning equipment and other noise-producing activities within the parking lot. On-site activity would generate noise levels of up to 56.9 dBA L_{eq} at a distance of 50 feet. Related Projects MV-5 and MV-6 do not have CEQA documents in which on-site operational noise has been analyzed. Therefore, assuming that operation of Related Projects MV-5 and MV-6 would consist of similar on-site activity as the project, Table 6.12-6 summarizes the potential cumulative noise level increases at this receptor (referred to as R5 in Section 4.12). As shown in Table 6.12-6, cumulative on-site noise levels would not result in perceptible increases in ambient noise (3 dBA). Therefore, on-site project operations would not result in cumulatively considerable on-site operational noise impacts.

Table 6.12-6: Cumulative On-Site Operational Noise Impacts – Unmitigated Project

Related Project	Distance of Nearest Receptor[1] (feet)	Distance of Receptor to Project	Combined On-site Operational Noise Level (dBA Leq) [2]	Existing Ambient Day/Night (dBA Leq) [3]	On-Site Operation Plus Ambient Day / Night (dBA Leq)	Increase over Ambient (dBA Leq)
MV-5 + MV-6	600	120	49.5	69.6 / 66.9	69.6 / 67.0	0.0 / 0.1

Notes:
* Noise levels are added logarithmically.
1 Distance to nearest receptor south of SR-60.
2 Assumes a reference noise level of 56.9 dBA L_{eq} at 50 feet.
3 See Table 4.12-1.

With regard to on-site residential uses, the project would result in significant impacts at on-site residential uses. However, the nearest on-site residence to cumulative projects MV-5 and MV-6 is located at a distance greater than 2,400 feet. At this distance on-site operational noise at MV-5 and MV-6 would be negligible. Therefore, cumulative impacts would not occur.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: Mitigation Measure 4.12.62D has been presented to reduce noise impacts from fixed mechanical equipment and internal roadways to the greatest extent feasible. With implementation of **Mitigation Measure 4.12.62D**, mechanical equipment noise and on-site mobile and idling activity would not exceed the City's nighttime exterior noise standard for off-site residential uses.

Significance Level After Mitigation: Less than significant impact. Implementation of **Mitigation Measure 4.12.6.2D** would eliminate any noise impacts on off-site residential areas due to the operation of logistic activities. Through the provision of a 250-foot setback, berms, and/or soundwalls, noise levels at the nearest residences would be reduced to below the City's thresholds. Therefore, with adherence to the identified mitigation measure, off-site impacts associated with this issue would be less than significant and would be less than cumulatively considerable. With respect to on-site residential uses, Section 4.12.6.3 determined that impacts to on-site residential uses would be less than significant with implementation of **Mitigation Measure 4.12.6.2D.** Additionally, the nearest on-site residence to cumulative projects MV-5 and MV-6 is located at a distance greater than 2,400 feet. At this distance on-site operational noise at MV-5 and MV-6 would be negligible. Therefore, cumulative impacts would not occur.

6.12.3.6 Long-term Utility Noise Impacts

Impact: *The project's contribution to long-term utility noise impacts in excess of City standards is less than cumulatively considerable.*

Threshold:	Would the project cause exposure of persons to or generation of noise levels in excess of standards established in the City of Moreno Valley General Plan, Moreno Valley Municipal Code, or applicable standards of other agencies?

Cumulative Impact Analysis

There is one existing SDG&E compressor station and two existing SCGC facilities located adjacent to the WLC Specific Plan area. No other similar facilities were identified in proximity to the WLC Specific Plan area.

The L_{eq} noise level generated by the compressor station does not exceed 60 dBA L_{eq} beyond the property lines of the facility. For SCGC blow-down events, noise generated could reach as high as 130 dBA just outside the fence line of the southern facility and in excess of 135 dB just outside the fence line of the northern facility. People within approximately 250 feet of the blow-down points would be exposed to noise levels greater than 115 dBA. No sensitive receptors are located such that noise levels from the compressor station and on-site project activity would result in cumulatively considerable impacts. Therefore, noise impacts associated with the operation of the compressor station in conjunction with project operations would not be cumulative considerable and would be less than significant.

SCGC blow-down events also have the potential to produce groundborne vibration. However, the effect of the blow-down groundborne vibration would be limited to within 100 feet of the equipment and would not be perceived beyond the facility fence line, resulting in a less than significant impact and no mitigation is required.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.13 Population, Housing, Employment

Cumulative effects to population, housing, and employment are described in this section. A summary of the project's potential incremental impacts to cumulative population, housing, and employment issues is provided in Section 6.13.1. The geographic and temporal scopes for cumulative impacts to population, housing, and employment issues are provided in Section 6.13.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the population, housing, and employment issues are discussed in Section 6.13.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.13.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.13-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact and, if so, if the project's incremental contribution would cumulatively considerable.

6.13.1 Project Impact Findings

The project's effects to population, housing, and employment are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project's impacts (see Section 4.13 of the Revised Sections of the FEIR is provided as well as a reference to the specific section and impact number if the impact determination is significant.

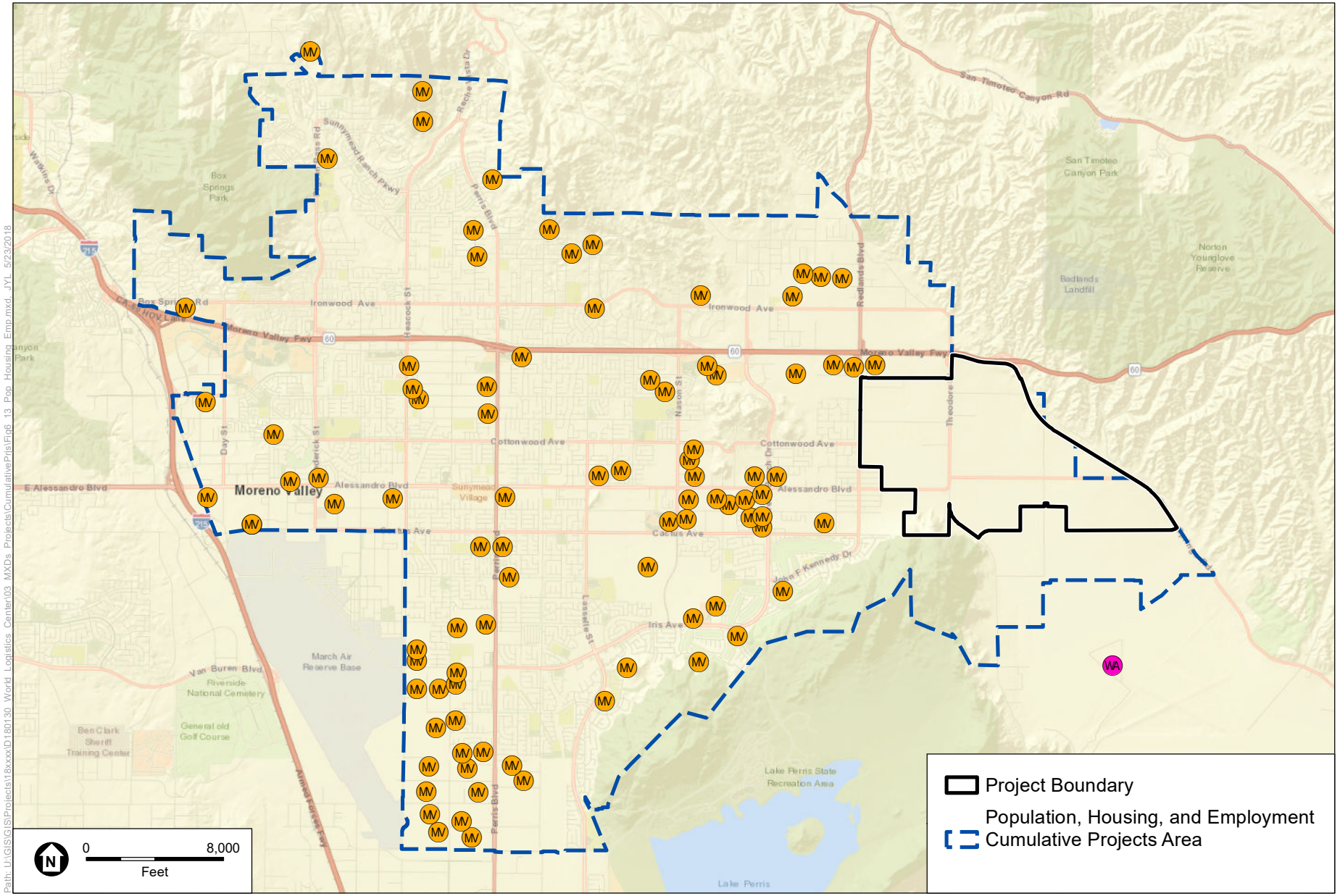
Would the project:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); **Less than Significant, Section 4.13.5.1.**
- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) that may lead to fiscal or economic impacts; **Less than Significant, Section 4.13.5.1.**
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; **Less than Significant, Section 4.13.5.2.**
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. **Less than Significant, Section 4.13.5.2.**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to population, housing, and employment identified in the FEIR.

6.13.2 Geographic and Temporal Scope

The cumulative impact geographic area for population, housing, and employment is the City of Moreno Valley. This geographic area was selected to capture growth within the City of Moreno Valley. Cumulative impacts to population, housing, and employment could result from the project in conjunction with other past, present and future projects located within the City of Moreno Valley. The geographic area for cumulative population and housing impacts is shown on Figure 6.13-1. The projects located within the cumulative population and housing impact area are listed in Table 6.13-1. The project would contribute to cumulative conditions starting as soon as project-generated jobs are created and would continue to contribute for the duration of the project.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.13-1

Population, Housing, and Employment Cumulative Projects Area

ESA

Table 6.13-1: Population, Housing, and Employment Cumulative Project Summary

Project ID	Project	Environmental Document Summary
MV-3	ProLogis	The Project's development of 2,244,638 square feet of distribution warehouse space would contribute to the cumulative increase in population and demand for housing due to the creation of 1,532 job opportunities within the geographic area.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility would contribute to the cumulative increase in population and demand for housing due to the creation of job opportunities within the geographic area.
MV-7	TR33962 / Pacific Scene Homes	The Project's subdivision of a 20-acre parcel into 31 single family lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-8	TR32460 / Sussex Capital	The Project's addition of 57 single family residential units would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-9	TR32459 / Sussex Capital	The Project's addition of 11 single-family residential lots on 13 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-10	TR30998 / Pacific Communities	The Project's subdivision of 60 acres into 47 single family lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-11	TR30411 / Pacific Communities	The Project's development of 25 single-family homes on 30.02 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-18	Convenience Store / Fueling Station	The Project's construction of a fueling station and convenience store would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-19	Senior Assisted Living	The Project's building of a 139-unit senior assisted living facility would contribute to the cumulative increase in population due to the availability of assisted living facilities and the provision of job opportunities within the geographic area.
MV-20	Moreno Marketplace	The Project's development of 95,905 square foot retail center would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

Project ID	Project	Environmental Document Summary
MV-21	PEN16-0053 Medical Center	The Project's development of a medical complex on 18.38 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-24	TM 36436 (PA12-0005)	The Project's subdivision of 43.52 acres into 159 single family residential lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-25	TR32142	The Project's development of 172 multi-family residences on 19.3 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-27	TR32917 / Empire land	The Project's development of 227 condominiums on 17.9 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-29	TR36340	The Project's development of 276 condominiums on 32 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-37	Vogel /PA09-004	The Project's development of 1,616,133 square feet of distribution warehouse space on 71 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	The Project's development of 1,616,133 square feet of distribution warehouse space on 71 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-41	First Nandina Logistics Center	The Project's development of 1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of distribution warehouse would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-42	Indian Street Commerce Center	The Project's development of 446,350 square feet of light industrial uses on 19.64 acre site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-43	Ivan Devries / PA06-0017	The Project's development of 446,350 square feet of light industrial uses on 19.64 acre site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

Project ID	Project	Environmental Document Summary
MV-44	Modular Logistics Center (Kearny RE Co)	The Project's development of 1,109,378 of office space 50.84 acre site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-45	Iris Plaza	The construction of a 109,289 square foot shopping center on 12.4 acres of land would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	The Project's subdivision of a 75.05-acre property into four parcels with business center land uses would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	The Project's development of a 1,560,046 square foot warehouse would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-50	San Michele Industrial Center, (Industrial Area SP)	The Project's development of a 414,533 square foot warehouse on a 17.17 acre-site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-51	Nandina Distribution Center IDS	The Project's development of a 770,867 industrial building on a 38 acre-site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-52	First Industrial III & IV, (Industrial Area SP)	The Project's development of a 880,000 square foot warehouse would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-53	I-215 Logistics Center (Amazon)	The Project's development of a 1,705,000 square foot distribution warehouse would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-54	Moreno Valley Logistics Center (Prologis)	The Project's development of a 1,736,180 square foot logistics center would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-60	Tract Map 36401	The Project's development of 216 dwelling units on a 19.4 acre site would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area.
MV-61	Walmart & Gas Station	The Project's development of a 193,000 square-feet of retail/commercial uses on a 22.28-acre site would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

Project ID	Project	Environmental Document Summary
MV-63	PA14-0053 (TTM 36760) Legacy Park	The Project's subdivision of 53 acres into 221 single family residential lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-66	TR34988 / Stratus Properties	The Project's construction of 271 dwelling units on 3.75 acres of outdoor recreation area would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-67	TR32515	The Project's construction of 174 senior single-family residential lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-68	PA07-0035	The Project's development of six industrial buildings on a 19.14 acre parcel would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-69	PA07-0039, (Industrial Area SP)	The Project's development of six industrial buildings on a 19.14 acre parcel would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-75	Aqua Bella Specific Plan	The Project's construction of 2,922 adult community dwelling units on 685 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-78	Overton Moore Properties PA08-0072	The Project's development of a 522,772 square foot industrial warehouse building on 25.96 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-79	Shaw Development	The Project's development of a 366,698 square foot industrial warehouse building on 25.96 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-80	PA15-0032 MV Cactus Center	The Project's development of 39,950 square feet of warehouse buildings, and mixed retail uses on 6.3 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	The Project's development of a 353,859 square foot of warehouse on 16.55 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

Project ID	Project	Environmental Document Summary
MV-84	PA16-0075 Brodiaea Business Center	The Project's development of 8 industrial buildings on 126 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	The Project's subdivision of 16.9 acres into 6 pads for commercial retail use would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-89	TR35663 / Kha	The Project's development of mixed use on approximately 2.2 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-93	PA14-0042 Edgemont Apartments	The Project's development of 112 apartment units on approximately 5.89 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-94	PA15-0002 Box Springs Apartments	The Project's development of 266 apartment units on approximately 12 acres would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-95	Moreno Beach Marketplace / Lowes	The Project's development of retail space on 14.2 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-97	32005 Red Hill Village, LLC	The Project's development of 214 clustered and single-family residential lots would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-100	32215 Winchester Associates "Scottish Village"	The Project's development of 194 clustered and single-family residential lots on 26.12-acre site would contribute to the cumulative increase in population but would have a beneficial impact to cumulative housing supply within the geographic area
MV-103	Gateway Business Park	The Project's development of a business park on 25.3 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area. areas.
MV-114	Stoneridge Town Centre - Vacant Restaurant	The Project's development of 563,328 square feet of commercial uses would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
MV-116	31621 Peter Sanchez	The Project's development of 563,328 square feet of commercial use on 55.45 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

Project ID	Project	Environmental Document Summary
MV-117	Riverside County Office Building	The Project's development of 52,250 square feet of office building use on 5.8 acres would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.
SJWA-1	San Jacinto Wildlife Land Management Plan	The Project's development of a land management plan would contribute to the cumulative increase in population due to the provision of job opportunities within the geographic area.

6.13.3 Cumulative Impact Evaluation

6.13.3.1 Population Growth

Impact: *The project's less than significant contribution to cumulative conditions would not cause or contribute to potential significant cumulative impacts related to substantial population growth in the area. Additionally, the project's less than significant contribution to cumulative conditions would not cause or contribute to a potential significant cumulative impact relating to population growth in the area that may lead to fiscal or economic impacts.*

Threshold:	Would the proposed WLC project induce substantial population growth in an area, either directly (e.g., new homes and businesses) or indirectly (e.g., extension of roads and infrastructure)? Would the proposed WLC project induce substantial population growth in an area, either directly (e.g., new homes and businesses) or indirectly (e.g., extension of roads and infrastructure) that may lead to fiscal or economic impacts?

Cumulative Impact Analysis

As discussed in Section 4.13 of the FEIR, the project would not contribute to substantial population growth and therefore would not result in an increased demand on the current or future housing in the region. It therefore would have a less-than-significant impact on inducing substantial population growth, or inducing substantial population growth that would lead to fiscal or economic impacts.

According to the Southern California Association of Governments (SCAG), the City of Moreno Valley is considered housing rich and jobs poor, with more than 3,000 vacant residential units (SCAG 2017). As the WLC project area represents the last largest remaining vacant land in the City of Moreno Valley, it would not significantly induce growth into areas where growth was not previously anticipated. Further, the project could result in an influx of new workers who would need to locate temporarily or permanently in the area. The City currently has an adequate supply of for-sale and rental housing. Implementation of the proposed project would benefit population and housing conditions relative to employment and jobs/housing ratio. MV 3 and MV 4 CEQA documents evaluated the effect on population housing and employment.

Other projects in the cumulative scenario would bring a mix of residential, employment, retail, medical and recreational uses that collectively would support the planned growth and local and regional population and housing goals within the geographic area of cumulative consideration. The incremental impacts of the proposed project, together with the incremental impacts of other projects in the cumulative scenario, would not cause or contribute to significant cumulative growth inducing impacts.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.13.3.2 Displace Substantial Housing/People

Impact: *The project's contribution to the displacement of substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere is less than cumulatively considerable.*

Threshold:	Would the proposed WLC project displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?

Cumulative Impact Analysis

Projects in the cumulative scenario are a mix of residential, industrial, retail/commercial, office and medical uses. A majority of these projects, including the project, are proposed on vacant parcels of land and/or would not displace people or housing. Additionally, according to SCAG, the City of Moreno Valley is considered housing rich and jobs poor, with more than 3,000 vacant residential units (SCAG 2017). Therefore, while the cumulative projects, including the project, may result in an influx of new workers who would need to locate temporarily or permanently in the area, they would benefit the population and housing conditions relative to employment and jobs/housing ratio, and would result in cumulatively less than significant impacts on the displacement of people or existing housing.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.14 Public Services and Facilities

Cumulative effects to public services and facilities are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to public services and facilities is provided in Section 6.14.1. The geographic and temporal scopes are provided in Section 6.14.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the public services and facilities issues are discussed in Section 6.14.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.14.3 as well as mitigation measures, if applicable, and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.14-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative ly considerable impact to public services and utilities. These potentially cumulative impacts are documented in the following section.

6.14.1 Project Impact Findings

The project's effects to public services and facilities are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.14 of Revised Sections of the FEIR) is provided as well as a reference to the specific section. All of the public services and facilities that were evaluated were determined to experience a less than significant impact with the implementation of the project.

6.14.1.1 Police Protection

Would the project:

- Cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for **Police Protection – Less than Significant, Section 4.14.1;**

  As shown, there are no unmitigated project-specific significant and unavoidable impacts to police services and facilities identified in the FEIR.

6.14.1.2 Fire Protection

Would the project:

- Cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for **Fire Protection – Less than Significant Impact, Section 4.14.2;**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to fire services and facilities identified in the FEIR.

6.14.1.3 Schools

Would the project:

- Cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for **Schools – Less than Significant, Section 4.14.3;**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to schools identified in the FEIR.

6.14.1.4 Parks, Recreation, and Trails

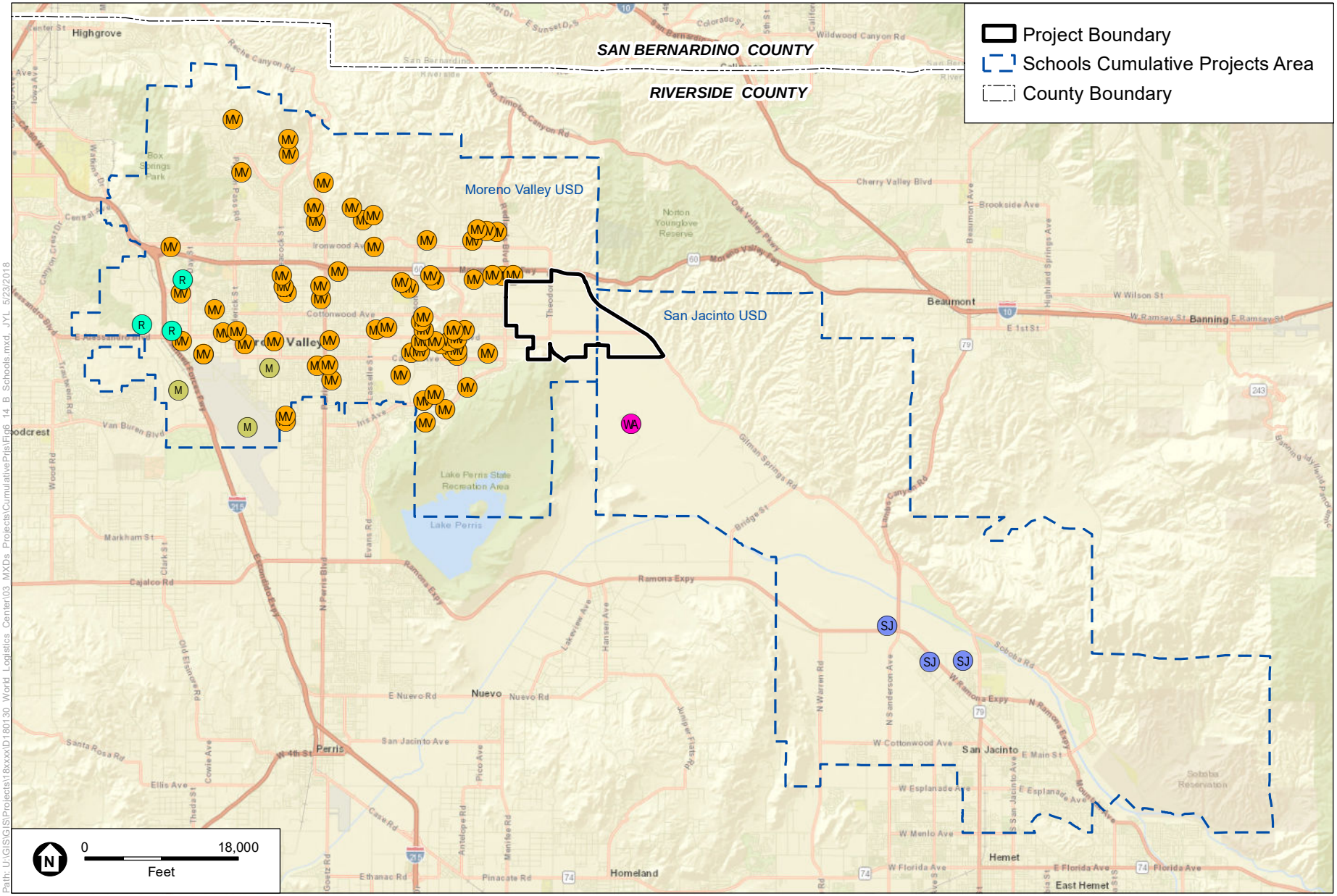
Would the project:

- Cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for **Parks, Recreation and Trails – Less than Significant, Section 4.14.4;**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to park, recreation and trail facilities identified in the FEIR.

6.14.2 Geographic and Temporal Scope

The cumulative impact geographic area for police, fire, and parks/recreation is the City of Moreno Valley because these services are provided by the City within its jurisdictional boundary. The cumulative impact geographic area for schools is the Moreno Valley Unified School District (MVUSD) and the San Jacinto Unified School District (SJUSD) because these school districts serve portions of the project site. Cumulative impacts to public services and utilities could result from the project in conjunction with other past, present and future projects located within the City of Moreno Valley and within the MVUSD and SJUSD. Cumulative projects within the City and both school districts will be evaluated with the project to determine if any cumulative impact would occur. The geographic area for cumulative police, fire, and parks/recreation impacts is shown on Figure 6.14-1. The geographic area for cumulative school impacts is shown on Figure 6.14-2. The projects located within the cumulative police, fire, and parks/recreation impact area is listed in Table 6.14-1. The projects located within the school impact area is listed in Table 6.14-2. As significant crossover exists between the two impact areas, projects included in both tables are described only once in Table 6.14-1.



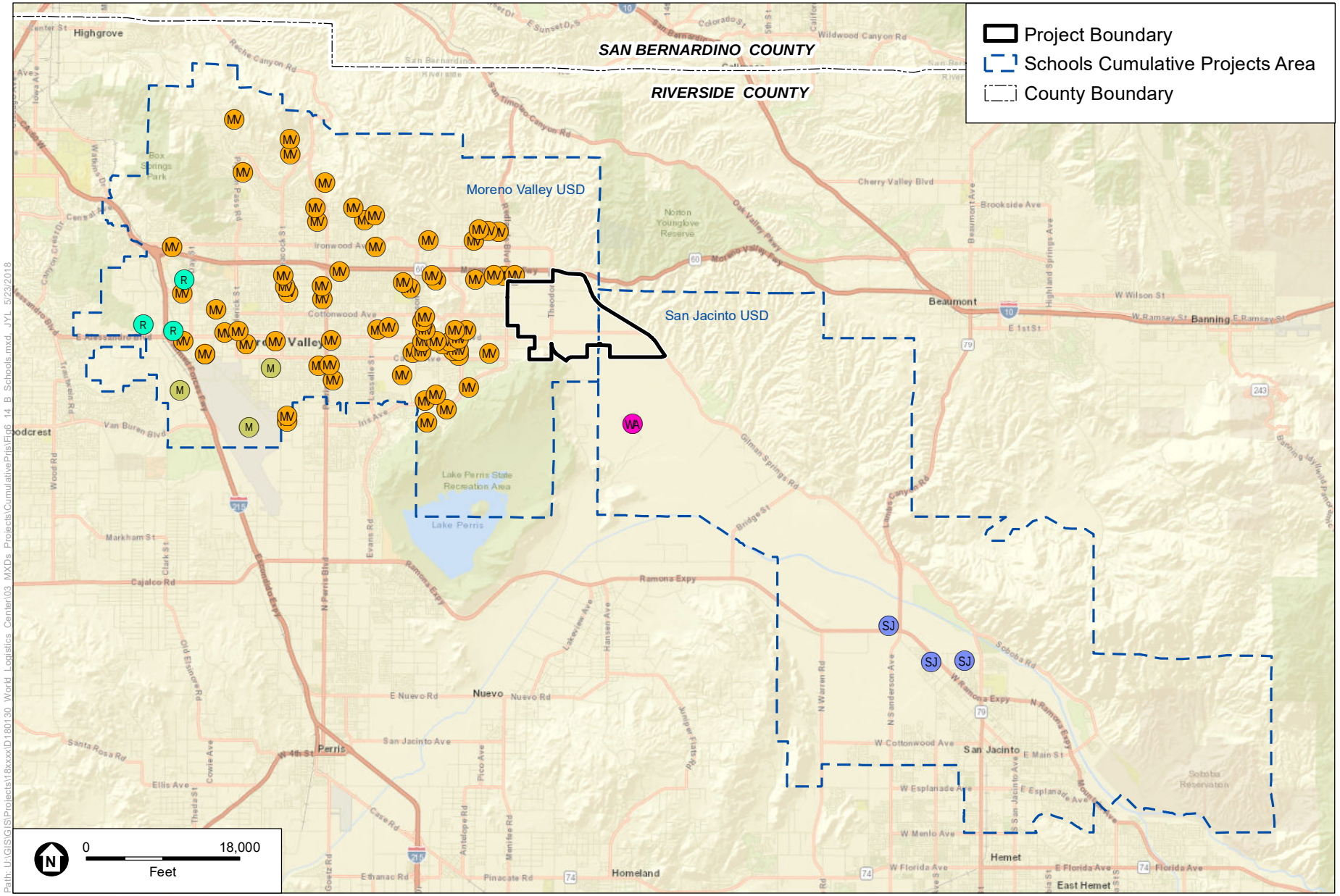
SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.14-1

Schools Cumulative Projects Area

ESA



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.14-2

Schools Cumulative Projects Area

ESA

Table 6.14-1: Public Services (Police, Fire, and Parks) Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
MV-3	ProLogis	The Project's development of 2,244,638 square feet of distribution warehouse space would contribute to the cumulative demand on public services (including fire, police schools, parks, and others) due to the increase in residents within the affected service areas.
MV-4	Westridge Commerce Center	The Project's development of a 937,260 square foot warehouse distribution facility contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in business activity within the affected service areas.
MV-7	TR33962 / Pacific Scene Homes	The Project's subdivision of a 20-acre parcel into 31 single family lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-8	TR32460 / Sussex Capital	The Project's addition of 57 single family residential units would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas..
MV-9	TR32459 / Sussex Capital	The Project's addition of 11 single-family residential lots on 13 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-10	TR30998 / Pacific Communities	The Project's subdivision of 60 acres into 47 single family lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-11	TR30411 / Pacific Communities	The Project's development of 25 single-family homes on 30.02 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-14	TR32548 / Gabel, Cook & Associates	The Project's subdivision of 36.24 acres for residential purposes would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-15	TR32218 / Whitney	The Project's subdivision of 17.25 acres for 63 single-family homes and open space would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-16	TR32284 / 26thCorporation & Granite Capitol	The Project's development of 32 residential lots on 8.77 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-17	TR31590 / Winchester Associates	The Project's subdivision of 30 acres for 96 single family homes would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-18	Convenience Store / Fueling Station	The Project's construction of a fueling station and convenience store would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in customer circulation within affected service areas.
MV-19	Senior Assisted Living	The Project's building of a 139-unit senior assisted living facility would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-20	Moreno Marketplace	The Project's development of 95,905 square foot retail center would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-21	PEN16-0053 Medical Center	The Project's development of a medical complex on 18.38 acres would contribute to the cumulative demand on public services (including fire, police schools, parks, and others) due to the increase in residents within the affected service areas.
MV-22	TR36882 (PA15-0010) SFR	The Project's subdivision of 9.4 acres into 40 residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-24	TM 36436 (PA12-0005)	The Project's subdivision of 43.52 acres into 159 single family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-25	TR32142	The Project's development of 172 multi-family residences on 19.3 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-27	TR32917 / Empire land	The Project's development of 227 condominiums on 17.9 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-28	TR34329 / Granite Capitol	The Project's development of 90 condominiums on 10.41 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-29	TR36340	The Project's development of 276 condominiums on 32 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-30	PA03-0168 TR 31517	The Project's development of 83 single-family residential lots on 31.71 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-32	TTM 31592 (P13-078) SFR	The Project's development of 115 single-family homes would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-33	TR32645 / Winchester Associates	The Project's subdivision of 18.48 acres into 53 single family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-34	TR34397 / Winchester Associates	The Project's subdivision of 19 acres into 50 single family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-35	TR31771 / Sanchez	The Project's subdivision of 9.34 acres into 25 single family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-36	TM 31618 (PA03-0106)	The Project's subdivision of 18.99 acres into 56 single family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-37	Vogel /PA09-004	The Project's development of 1,616,133 square feet of distribution warehouse space on 71 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	The Project's development of 1,616,133 square feet of distribution warehouse space on 71 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-41	First Nandina Logistics Center	The Project's development of 1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of distribution warehouse would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-42	Indian Street Commerce Center	The Project's development of 446,350 square feet of light industrial uses on 19.64 acre site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-43	Ivan Devries / PA06-0017	The Project's development of 446,350 square feet of light industrial uses on 19.64 acre site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-44	Modular Logistics Center (Kearny RE Co)	The Project's development of 1,109,378 of office space 50.84 acre site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-45	Iris Plaza	The construction of a 109,289 square foot shopping center on 12.4 acres of land would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.
MV-47	PA07-0129 TR 35606 SFR	The Project's subdivision of a 4.8 acre parcel into 16 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	The Project's subdivision of a 75.05-acre property into four parcels with business center land uses would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	The Project's development of a 1,560,046 square foot warehouse would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.
MV-50	San Michele Industrial Center, (Industrial Area SP)	The Project's development of a 414,533 square foot warehouse on a 17.17 acre-site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-51	Nandina Distribution Center IDS	The Project's development of a 770,867 industrial building on a 38 acre-site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.
MV-52	First Industrial III & IV, (Industrial Area SP)	The Project's development of a 880,000 square foot warehouse would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees, business activity, and customers within the affected service areas.
MV-53	I-215 Logistics Center (Amazon)	The Project's development of a 1,705,000 square foot distribution warehouse would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-54	Moreno Valley Logistics Center (Prologis)	The Project's development of a 1,736,180 square foot logistics center would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-56	Tract Map 33810	The Project's subdivision of 4.62 acres into 16 lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-57	Tract Map 34151	The Project's subdivision of 8.95 acres into 37 single-family lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-58	Tract Map 33024	The Project's subdivision of 2.17 acres into 8 single-family lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-59	Tract Map 31442	The Project's subdivision of 15.8 acres into 63 single-family lots would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-60	Tract Map 36401	The Project's development of 216 dwelling units on a 19.4 acre site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in residents within the affected service areas.
MV-61	Walmart & Gas Station	The Project's development of a 193,000 square-feet of retail/commercial uses on a 22.28-acre site would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-63	PA14-0053 (TTM 36760) Legacy Park	The Project's subdivision of 53 acres into 221 single family residential lots would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-65	TR33607 / TL Group	The Project's construction of 52 condominiums on 4.28 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-66	TR34988 / Stratus Properties	The Project's construction of 271 dwelling units on 3.75 acres of outdoor recreation area would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-67	TR32515	The Project's construction of 174 senior single-family residential lots would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-68	PA07-0035	The Project's development of six industrial buildings on a 19.14 acre parcel would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-69	PA07-0039, (Industrial Area SP)	The Project's development of six industrial buildings on a 19.14 acre parcel would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-75	Aqua Bella Specific Plan	The Project's construction of 2,922 adult community dwelling units on 685 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-78	Overton Moore Properties PA08-0072	The Project's development of a 522,772 square foot industrial warehouse building on 25.96 acres would contribute to the cumulative demand on public services (including fire, police, schools, parks, and others) due to the increase in employees and business activity within the affected service areas.
MV-79	Shaw Development	The Project's development of a 366,698 square foot industrial warehouse building on 25.96 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees and business activity within the affected service areas.
MV-80	PA15-0032 MV Cactus Center	The Project's development of 39,950 square feet of warehouse buildings, and mixed retail uses on 6.3 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees and business activity within the affected service areas.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	The Project's development of a 353,859 square foot of warehouse on 16.55 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees and business activity within the affected service areas.
MV-84	PA16-0075 Brodiaea Business Center	The Project's development of 8 industrial buildings on 126 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees and business activity within the affected service areas.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	The Project's subdivision of 16.9 acres into 6 pads for commercial retail use would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-86	TR32505 / DR Horton	The Project's subdivision of 18.66 acres into 72 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-88	TR33771 / Creative Design Associates	The Project's construction of 12 condominiums on 0.9 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in residents within the affected service areas.
MV-89	TR35663 / Kha	The Project's development of mixed use on approximately 2.2 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-91	TR31305 / Richmond American	The Project's subdivision of 22.9 acres into 87 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-92	TR 33256	The Project's subdivision of 28.6 acres into 99 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-93	PA14-0042 Edgemont Apartments	The Project's development of 112 apartment units on approximately 5.89 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-94	PA15-0002 Box Springs Apartments	The Project's development of 266 apartment units on approximately 12 acres would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-95	Moreno Beach Marketplace / Lowes	The Project's development of retail space on 14.2 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-96	31394 Pigeon Pass, Ltd.	The Project's subdivision of 46 acres into 78 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-97	32005 Red Hill Village, LLC	The Project's development of 214 clustered and single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-98	33388 SCH Development, LLC	The Project's subdivision of 19.5 acres into 16 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-100	32215 Winchester Associates "Scottish Village"	The Project's development of 194 clustered and single-family residential lots on 26.12-acre site would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-103	Gateway Business Park	The Project's development of a business park on 25.3 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-106	35304 Jimmy Lee	The Project's development of 15 dwelling units on 0.9-acre site would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-110	TM 33417	The Project's development of 15 dwelling units on 0.9-acre site would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-111	35769 Michael Chen	The Project's development of 16 condo units on 1.21-acre site would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-112	PA09-0006 Jim Nydam	The Project's development of 15 affordable housing units on 1.57-acre site would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.

Project ID	Project Name	Environmental Document Summary
MV-113	Ironwood Residential	The Project's subdivision of 75 acres into 101 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-114	Stoneridge Town Centre - Vacant Restaurant	The Project's subdivision of 75 acres into 101 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-116	31621 Peter Sanchez	The Project's development of 563,328 square feet of commercial use on 55.45 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-117	Riverside County Office Building	The Project's development of 52,250 square feet of office building use on 5.8 acres would contribute to the cumulative demand on public services (including fire, police, and others) due to the increase in employees, customers, and business activity within the affected service areas.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	The Project's subdivision of 75 acres into 101 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
MV-119	32126 Salvador Torres	The Project's subdivision of 9 acres into 35 single-family residential lots would contribute to the cumulative demand on public services (including fire, police, schools, and others) due to the increase in residents within the affected service areas.
SJWA-1	San Jacinto Wildlife Land Management Plan	The Project's development of a land management plan would contribute to the cumulative demand for police and fire protection due to the increase in recreational trails and wildfire management activities.

Table 6.14-2: Public Services (Schools) Cumulative Projects Summary

Project ID	Project Name	Type of Environmental Document
MV-3	ProLogis	EIR
MV-4	Westridge Commerce Center	EIR
MV-7	TR33962 / Pacific Scene Homes	ND
MV-8	TR32460 / Sussex Capital	ND
MV-9	TR32459 / Sussex Capital	ND
MV-10	TR30998 / Pacific Communities	ND
MV-11	TR30411 / Pacific Communities	ND
MV-14	TR32548 / Gabel, Cook & Associates	ND
MV-15	TR32218 / Whitney	ND
MV-16	TR32284 / 26thCorporation & Granite Capitol	ND
MV-17	TR31590 / Winchester Associates	ND
MV-18	Convenience Store / Fueling Station	ND
MV-19	Senior Assisted Living	ND
MV-20	Moreno Marketplace	ND
MV-21	PEN16-0053 Medical Center	MND
MV-22	TR36882 (PA15-0010) SFR	MND
MV-24	TM 36436 (PA12-0005)	MND
MV-25	TR32142	ND
MV-27	TR32917 / Empire land	ND
MV-28	TR34329 / Granite Capitol	ND
MV-29	TR36340	ND
MV-30	PA03-0168 TR 31517	ND
MV-32	TTM 31592 (P13-078) SFR	ND
MV-33	TR32645 / Winchester Associates	ND
MV-34	TR34397 / Winchester Associates	ND
MV-35	TR31771 / Sanchez	ND
MV-36	TM 31618 (PA03-0106)	EIR
MV-37	Vogel /PA09-004	EIR
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	EIR
MV-41	First Nandina Logistics Center	EIR
MV-42	Indian Street Commerce Center	EIR
MV-43	Ivan Devries / PA06-0017	ND
MV-44	Modular Logistics Center (Kearny RE Co)	EIR
MV-45	Iris Plaza	IS
MV-47	PA07-0129 TR 35606 SFR	EXEMPT
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	EIR
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	MND
MV-50	San Michele Industrial Center, (Industrial Area SP)	ND

Project ID	Project Name	Type of Environmental Document
MV-51	Nandina Distribution Center IDS	MND
MV-52	First Industrial III & IV, (Industrial Area SP)	MND
MV-53	I-215 Logistics Center (Amazon)	MND
MV-54	Moreno Valley Logistics Center (Prologis)	EIR
MV-56	Tract Map 33810	EXEMPT
MV-57	Tract Map 34151	ND
MV-58	Tract Map 33024	ND
MV-59	Tract Map 31442	ND
MV-60	Tract Map 36401	MND
MV-61	Walmart & Gas Station	EIR
MV-63	PA14-0053 (TTM 36760) Legacy Park	MND
MV-65	TR33607 / TL Group	ND
MV-66	TR34988 / Stratus Properties	ND
MV-67	TR32515	ND
MV-68	PA07-0035	ND
MV-69	PA07-0039, (Industrial Area SP)	ND
MV-75	Aqua Bella Specific Plan	EIR
MV-78	Overton Moore Properties PA08-0072	MND
MV-79	Shaw Development	MND
MV-80	PA15-0032 MV Cactus Center	MND
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	ND
MV-84	PA16-0075 Brodiaea Business Center	ND
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	ND
MV-86	TR32505 / DR Horton	ND
MV-88	TR33771 / Creative Design Associates	EXEMPT
MV-89	TR35663 / Kha	EXEMPT
MV-91	TR31305 / Richmond American	ND
MV-92	TR 33256	ND
MV-93	PA14-0042 Edgemont Apartments	EIR
MV-94	PA15-0002 Box Springs Apartments	MND
MV-95	Moreno Beach Marketplace / Lowes	MND
MV-96	31394 Pigeon Pass, Ltd.	ND
MV-97	32005 Red Hill Village, LLC	ND
MV-98	33388 SCH Development, LLC	ND
MV-100	32215 Winchester Associates "Scottish Village"	ND
MV-103	Gateway Business Park	MND
MV-106	35304 Jimmy Lee	ND
MV-110	TM 33417	ND
MV-111	35769 Michael Chen	EXEMPT

Project ID	Project Name	Type of Environmental Document
MV-112	PA09-0006 Jim Nydam	EXEMPT
MV-113	Ironwood Residential	MND
MV-114	Stoneridge Town Centre - Vacant Restaurant	ND
MV-116	31621 Peter Sanchez	ND
MV-117	Riverside County Office Building	ND
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	ND
MV-119	32126 Salvador Torres	ND
R-2	Alessandro Business Center (Western Realco)	The Project's development of 662,018 square feet of industrial warehouse space could contribute to the cumulative demand on schools if employees relocated to the area with school aged children.
R-5	Canyon Springs Healthcare Campus Specific Plan	The Project's development of a healthcare campus on 50.85 acres would contribute to the cumulative demand on schools due to potential population growth as a result of 2,450 new permanent jobs.
M-2	Meridian Business Park Phases I and II	The Project's development of a 130 acre business park would contribute to the cumulative demand on schools due to potential population growth from the addition of new jobs.
M-8	March LifeCare Campus Specific Plan	The development of a medical campus on approximately 236 acres would contribute to the cumulative demand on schools due to potential population growth from the addition of new jobs.
M-9	TM 34748	The Project's subdivision of 40 acres into 135 single-family residential lots would contribute to the cumulative demand on schools due to the increase of residents within the school district.

6.14.3 Cumulative Impact Evaluation

6.14.3.1 Police Protection

6.14.3.1.1 New or Altered Law Enforcement Facilities

Impact: *The project's contribution to significant environmental effects from new or altered law enforcement facilities would be less than cumulatively considerable.*

Threshold:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police services?

Cumulative Impact Analysis

The cumulative impact geographic area for police protection services is the City of Moreno Valley. Police protection services for the City, including the project and cumulative development, is provided by the City of Moreno Valley Police Department (MVPD), which contracts police services from the Riverside County Sheriff's Department (RCSD). As such, the City has access to all of the RCSD services which include dispatch, a specials weapons and tactics (SWAT) team, a bomb squad, a dive team, off-highway enforcement team, and a helicopter.

In general, impacts to the MVPD services and facilities during the construction of cumulative development would be addressed as part of each cumulative project's development review process conducted by the City. During construction of cumulative development, equipment and building materials could be temporarily stored on the cumulative project sites, which could result in theft, graffiti, and vandalism. Many cumulative project sites are located in areas of moderate to high vehicular activity from nearby streets. In addition, the construction sites of the cumulative projects would be fenced along the perimeters, when applicable, with the height and fence materials subject to review and approval by the City. Temporary lane closures may be required for right-of-way frontage improvements and utility construction. However, these closures would be temporary in nature and in the event of partial lane closures, both directions of travel on area roadways and access to the cumulative project sites would be maintained. Due to their proximity to the project site, should project construction occur concurrently with the construction of cumulative projects MV-4, MV-5, MV-6, and MV-126, coordination with these construction sites would be implemented through each cumulative project's respective construction traffic management plan, if applicable, which would ensure emergency access and traffic flow are maintained on adjacent right-of-ways. In addition, construction-related traffic generated by the cumulative development would not significantly impact the MVPD responses within the vicinities of the cumulative projects as emergency vehicles normally have a variety of options for avoiding traffic, such using sirens to clear a path of travel or driving in the lanes of opposing traffic.

According to the MVPD, there are no planned improvements for the MVPD facilities.[1],[2] If expanded police facilities were determined warranted by the MVPD, and were foreseeable, the impacts of the construction and operation of such a station would be analyzed at that time under CEQA as a project independent of the cumulative development. Moreover, the expansion of any police station would likely be on an infill lot potentially less than an acre in size. Generally, development associated with typical police stations is unlikely to result in significant unavoidable impacts, and projects involving the construction or expansion of a police station are typically anticipated to be addressed pursuant to CEQA through the use of a Class 32 categorical infill exemptions (CEQA Guidelines 15332) or (mitigated) negative declarations since they are likely relatively small structures on infill parcels. Accordingly, the

[1] Deputy M. Reilly #4695, Community Services Unit, Moreno Valley Police Department, letter correspondence for the Ironwood Residential Project, dated June 7, 2016. Ironwood Residential Project Final Initial Study/Mitigated Negative Declaration, prepared by ESA, dated February 2017.

[2] Ibid.

need for additional police protection services as part of an unplanned or expanded police station at this time is not an environmental impact of a project or one that a project is required to mitigated.[3]

It is expected that the cumulative projects (particularly those of a larger nature) would be subject to discretionary review by the MVPD on a project-by-project basis to ensure that sufficient security measures are implemented to reduce potential impacts to police protection services. Many of the cumulative projects would also be expected, when applicable, to provide on-site security, personnel and/or design features for their residents and patrons per standard development practices for the given uses. Further, the City would collect development impact fees from the cumulative projects that would be used to fund the MVPD expenditures as necessary to offset any cumulative incremental impact from each cumulative project on police protection services. The protection of public safety is the first responsibility of local government, and local officials have an obligation to give priority to the provision of adequate public safety services, which are typically financed through the City general funds.

With regard to emergency response times, cumulative projects would introduce new uses which would generate additional traffic in the vicinity of the cumulative development. Traffic from the cumulative development could have the potential to affect emergency vehicle response times to the cumulative project sites and surrounding properties due to travel time delays caused by the additional traffic. Emergency vehicles would access the cumulative project sites directly from the surrounding roadways. The drivers of emergency vehicles have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. As such, emergency access to the vicinity of cumulative development would be maintained at all times, and the increase in cumulative traffic generated by cumulative development would not significantly impact emergency vehicle response times. Further, consistent with the *City of Hayward v. Trustees of California State University*,[4] significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area a project, and potential impacts on emergency response times are not an environmental impact that CEQA requires a project to mitigate.

The project is located in an area of high vehicular activity and would provide construction fencing and private security during construction. As such, the project would not cause a significant impact to police protection services during construction. Therefore, the project's contribution to cumulative impacts during construction on the MVPD's emergency response would not be cumulatively considerable.

The project would be designed and operated per applicable standards required by the City for new development in regard to public safety. The project would be required to pay the applicable development impact fees to the City. Similar to cumulative development, the drivers of emergency vehicles would have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, the project's contribution to cumulative impacts to MVPD facilities would not be cumulatively considerable.

Based on the above considerations, the project would result in a less than cumulatively considerable contribution to the need for the construction of new, or expanded police facilities and, as such, cumulative impacts on police protection services would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

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[3] Court of Appeal of the State of California, First Appellate District, Division Three, Filed 11/30/15; City of Hayward v. Board of Trustees (Alameda County Superior Court No. RG09480852); Hayward Planning Association et al., v. Board of Trustees of the California State University, http://law.justia.com/cases/california/court-of-appeal/2015/a131412a.html, accessed April 2018.

[4] Court of Appeal of the State of California, First Appellate District, Division Three, Filed 11/30/15; City of Hayward v. Board of Trustees (Alameda County Superior Court No. RG09480852); Hayward Planning Association et al., v. Board of Trustees of the California State University, http://law.justia.com/cases/california/court-of-appeal/2015/a131412a.html, accessed April 2018.

Significance Level After Mitigation: Less than significant impact.

6.14.3.2 Fire Protection

6.14.3.2.1 New or Altered Fire-Fighting Facilities

Impact: *The project's contribution to significant environmental effects from new or altered fire-fighting facilities would be less than cumulatively considerable.*

Threshold:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire-fighting facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire services?

Cumulative Impact Analysis

The cumulative impact geographic area for fire protection is the City of Moreno Valley. Fire protection for the City, including the project and cumulative development, is provided by the City of Moreno Valley Fire Department (MVFD), which contracts with the Riverside County Fire Department (RCFD).

In general, impacts to the MVFD services and facilities during the construction of cumulative development would be addressed as part of each cumulative project's development review process conducted by the City. Construction activities associated with cumulative development may temporarily increase the demand for fire protection and emergency medical services, and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, covering and coatings, to heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with the requirements of the California Occupational Safety and Health Administration (OSHA), all construction managers and personnel of cumulative development would be trained in fire prevention and emergency response. Further, fire suppression equipment specific to construction of the cumulative development would be maintained on the cumulative project sites. As applicable, all cumulative construction activities would be required to comply with the 2013 California Building Code (CBC); the 2013 California Fire Code (CFD); and the City's Fire Code.

Construction activities may involve temporary lane closures of right-of-way frontage improvements and utility construction. However, these closures would be temporary in nature and in the event of partial lane closures, both directions of travel on area roadways and access to the cumulative project sites would be maintained. Due to their proximity to the project site, should project construction occur concurrently with the construction of cumulative projects MV-4, MV-5, MV-6, and MV-126, coordination with these construction sites would be implemented through each cumulative project's respective construction traffic management plan, if applicable, which would ensure emergency access and traffic flow are maintained on adjacent right-of-ways. In addition, construction-related traffic generated by the cumulative development would not significantly impact MVFD response within the vicinities of the cumulative projects as emergency vehicles normally have a variety of options for avoiding traffic, such using sirens to clear a path of travel or driving in the lanes of opposing traffic.

During operation, although the cumulative demand on MVFD services would increase, cumulative impacts on fire protection and emergency medical services would be reduced through each cumulative project's regulatory compliance and site-specific design and safety features. Each cumulative project would be subject to the required review by the MVFD for compliance with Fire Code and Building Code regulations related to emergency response, emergency access, fire flow, and fire safety that would reduce potential cumulative impacts to fire protection and emergency services. Further, the City would collect development impact fees from cumulative projects that would be used to fund MVFD expenditures as necessary to offset any cumulative incremental impact from each cumulative project on fire protection services. The protection of public safety is the first responsibility of local government,

and local officials have an obligation to give priority to the provision of adequate public safety services, which are typically financed through the City general funds.

With regard to emergency response times, cumulative projects would introduce new uses which would generate additional traffic in the vicinity of the cumulative development. Traffic from the cumulative development could have the potential to affect emergency vehicle response times to the cumulative project sites and surrounding properties due to travel time delays caused by the additional traffic. The drivers of emergency vehicles have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. As such, emergency access would be maintained at all times, and the increase in cumulative traffic generated by cumulative development would not significantly impact emergency vehicle response times to the affected areas. Further, consistent with the *City of Hayward v. Trustees of California State University*,[5] significant impacts under CEQA consist of adverse changes in any of the physical conditions within the area a project, and potential impacts on emergency response times are not an environmental impact that CEQA requires a project to mitigate.

Cumulative project sites which are located in Very High Fire Severity Zone (VHFSZ) and susceptible to wildland fire hazards would adhere to the special construction features set forth in Chapter 7A of the CBC. Further, any significant risk of loss, injury, or death involving wildland fires, would be minimized to the maximum extent feasible through implementation of cumulative project-specific fuel modification plans, if applicable, that would be subject to review and approval by the MVFD.

In compliance with OSHA, the project would require all construction managers and personnel to be trained in fire prevention and emergency response. Fire suppression equipment would be maintained onsite and all construction activities would comply with the 2013 CBC, 2013 CFD, and the City's Fire Code. Therefore, the project's contribution to cumulative impacts during construction on MVFD's emergency response would not be cumulatively considerable.

The project would be subject to the required review of the MVFD for compliance with the Fire Code and Building Code regulations related to emergency response, emergency access, fire flow, and fire safety that would reduce potential impacts to fire protection and emergency services. The project includes a future 1.5-acre urban fire station within its boundaries to be dedicated to the City to help offset increased fire service needs. The new fire station will be located at the north end of Planning Area 11 and is required to be built during Phase I. Placement of the new fire station is subject to review and approval by the Fire Chief. As portions of the project site are located within a State-designated VHFSZ, the project would comply with Chapter 7A of the CBC. Further, the project would be required to pay the applicable development impact fees to the City. Compliance with payment of fees could further offset the cumulative impact from the cumulative projects on the project's proposed fire station. Therefore, the project's contribution to cumulative impacts to MVPD facilities would not be cumulatively considerable.

Based on the above considerations, the project would result in a less than cumulatively considerable contribution to the need for the construction of new, or expanded fire facilities and, as such, cumulative impacts on fire protection services would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

[5] Court of Appeal of the State of California, First Appellate District, Division Three, Filed 11/30/15; City of Hayward v. Board of Trustees (Alameda County Superior Court No. RG09480852); Hayward Planning Association et al., v. Board of Trustees of the California State University, http://law.justia.com/cases/california/court-of-appeal/2015/a131412a.html, accessed April 2018.

6.14.3.3 Schools

6.14.3.3.1 New or Altered School Facilities

Impact: The project's contribution to significant environmental effects from new or altered school facilities would be less than cumulatively considerable.

Threshold:	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Cumulative Impact Analysis

The project and cumulative development would be served by the MVUSD and SJUSD. The MVUSD includes 23 elementary schools, 6 middle schools, 5 high schools, and 9 specialized schools. The SJUSD includes 1 preschool, 7 elementary schools, 2 middle schools, 2 high schools, and 2 specialized schools.

Construction of the cumulative development would require the participation of construction employees who would be hired from a mobile regional construction work force that moves from project to project. Typically, construction workers pass through various development projects on an intermittent bass as their particular trades are required. Given the mobility and short durations of work at a particular site, and a large construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their residences within this region or move from other regions as a result of their work on the cumulative development. Accordingly, construction of cumulative development is not anticipated to generate new students needing to attend local schools within the MVUSD or SJUSD.

The MVUSD and SJUSD monitors enrollment numbers at all schools within their districts. Seating shortages can be addressed through changes in attendance boundaries and new/expanded school facilities. Nonetheless, cumulative development is expected to generate students that would attend local schools within the MVUSD and SJUSD. As such, this cumulative development could require new or expanded school facilities. The cumulative projects would be required to pay development fees for schools to the MVUSD or SJUSD prior to the issuance of grading permits pursuant to SB 50. Pursuant to Government Code Section 65995, the payment of developer fees would be considered full and complete mitigation of schools impacts by cumulative development.

Construction of the project is not anticipated to generate new students needing to attend local school within the MVUSD or SJUSD. The project does not include residential uses but is expected to generate approximately 15,000 to 25,000 new jobs in the City. According to Section 4.14.3.5 of the FEIR, it is speculative to estimate how many workers would actually live within the City and how many would commute from the surrounding area. Although the exact number is speculative, any increase is not expected to be substantial and would not generate significant new demands related to the need for new or altered schools. Further, the project would be required to pay development fees pursuant to SB 50. Therefore, the project's contribution to cumulative impacts to school facilities would be less than cumulatively considerable.

Based on the above considerations, the project would result in a less than cumulatively considerable contribution to the need for the construction of new, or expanded school facilities and, as such, cumulative impacts on schools would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.14.3.4 Parks Recreation, and Trails

6.14.3.4.1 Deterioration of Existing Park, Recreation and Trail Facilities

Impact: *The project's contribution to the deterioration of existing park, recreation and trail facilities would be less than cumulatively considerable.*

Threshold:	Would the project result in increased use of existing neighborhood and regional parks or other recreational facilities (e.g., trails) where substantial physical deterioration would occur or be accelerated?

Cumulative Impact Analysis

The cumulative impact geographic area for parks, recreation, and trails is the City of Moreno Valley. The City maintains over 358 acres of parks and park facilities and approximately 10 miles of trails. This includes 39 parks and facilities including senior recreation centers and conference centers as well as 20 lighted sports fields.

Most park visits originate from residential uses. Typically, employees are engaged in their work during the day and do not contribute substantial demand for parks. If employees use the parks, such usage would occur during the week rather the weekend. Construction workers may visit a park to eat lunch or for recreation after a day of work. Cumulative development would increase the residential and visitor population which could create new demand on parks and recreation space in the vicinities of the cumulative projects. Some cumulative projects could include recreational facilities and open space features that would serve cumulative project residents and guests and would thereby reduce cumulative demand on public parks. Pursuant to the Quimby Act, the City would require the dedication of land, or the payment of fees for park and/or recreational facilities from the cumulative projects to offset any cumulative incremental impact from each cumulative project on parks, recreation, and trails. Therefore, with the dedication of land, or the payment of development fees, cumulative development would not substantially deteriorate or accelerate the deterioration of recreational facilities or resources.

The project includes the development of a master-planned logistics center; no residential development is proposed. There is a potential for the project to indirectly generate new residents in the City, although predicting the exact number would be too speculative. Trail linkages are provided as part of the project for future linkages to Gilman Springs Road, to the Lake Perris State Recreation Area, and to the San Jacinto Wildlife Area. Future development within the project site will pay the applicable development impact fees for parks or recreational services. Therefore, the project's contribution to cumulative impacts to parks, recreation, and trails would be less than cumulatively considerable.

Based on the above considerations, the project would result in less than cumulatively considerable contribution to increased use of existing neighborhood and regional parks or other recreational facilities where substantial physical deterioration would occur or be accelerated. As such, cumulative impacts on parks, recreation, and trails would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

Impact: *The project's contribution to environmental effects associated with the construction or expansion of recreational facilities would be less than cumulatively considerable.*

Threshold:	Would the project include recreational facilities or require the construction or expansion of recreational facilities that would have an adverse physical effect on the environment.

Cumulative Impact Analysis

Cumulative development could result in the construction or expansion of recreational facilities that could have an adverse physical effect on the environment. However, to offset the cumulative demand on park facilities and services, the project applicants of each residential cumulative project would be responsible for meeting the parkland dedication or fee requirements pursuant to the Quimby Act. Therefore, with the parkland dedication or payment of development fees, cumulative development would not have an adverse physical effect on the environment.

The project does not include the construction or expansion of a recreational facility since it would not create any substantial demands on recreational facilities. Therefore, the project's contribution to cumulative impacts to parks, recreation, and trails would not be cumulatively considerable.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant impact.

6.15 Traffic and Circulation

Cumulative effects to traffic and circulation are described in this section. The entire revised traffic study is located in Appendix F. A summary of the project's potential impacts to traffic and circulation issues is provided in Section 6.15.1. The cumulative impact geographic area for traffic and circulation issues is provided in Section 6.15.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the traffic and circulation issues are discussed in Section 6.15.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.15.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the city will fully build out by 2040, the cumulative impact analysis assumes worse case cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.15-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they would contribute to a cumulatively considerable impact to traffic and circulation. These potentially cumulative impacts are documented in the following section.

In 2012 an application was made to the City of Moreno Valley for the World Logistics Center (WLC), a new plan for the area that had been subject to the Moreno Highlands Specific Plan. A notice of preparation for the WLC environmental impact report (EIR) was issued in February 2012. A traffic impact analysis (TIA) was prepared as one of several technical studies in support of the EIR and submitted to the City in September 2014. The full Draft EIR, including traffic sections based on the TIA, was submitted for public comment in February 2013 and was the subject of public hearings held in June 2015. The General Plan Amendment, zoning change, and the WLC Specific Plan, were adopted by the City Council in August 2015 and adopted again through the initiative process in November 2015.

In the time since the 2014 TIA, a number of developments have occurred that affect the forecast of traffic impacts from the WLC. These changes include:

- The most important new development was the completion in October 2016 of *High-Cube Warehouse Vehicle Trip Generation Analysis*, a major trip generation study for high-cube warehouses, the predominant form of land use in the WLC. This study was jointly sponsored by the South Coast Air Quality Management District (SCAQMD) and the National Association of Industrial and Office Properties (NAIOP), and was conducted by the Institute of Transportation Engineers (ITE). The results were incorporated into the 10th edition of ITE's *Trip Generation Manual*.
- This study replaces the multitude of earlier, smaller studies that produced conflicting results and created uncertainty regarding the amount of traffic generated by the newer, more automated type of high-cube warehouse proposed for the WLC. The 2016 study found that on average, warehouses generate fewer trips than had been assumed in the previous TIA for every analysis period (24% fewer in the AM peak period, 14% fewer in the PM peak hour, and 15% fewer on a daily basis).

However, the volume of truck trips being generated in off-peak periods was higher than had been previously assumed.

- The trip generation rates for other land uses (light logistics, convenience market, etc.) were also updated to those in the 10th edition of ITE's *Trip Generation Manual*.
- The study analysis years were updated so that 2018 is used for Existing Conditions, 2025 is used for Phase 1, and 2040 is used for Cumulative Conditions.
- The assumptions regarding background (i.e. non-WLC) land development have been updated to reflect the Sustainable Community Strategy adopted by SCAG in 2016. The list of reasonably foreseeable projects was also updated to account for projects that have been completed or have dropped out, and for projects that have been added to the pipeline.
- The assumptions regarding changes to the transportation network have been updated to reflect the Regional Transportation Plan adopted by SCAG in 2016. The existing conditions network was also updated to account for projects completed since the base year of the previous TIA (2012).
- New traffic counts were performed for all study intersections and roadway segments, and new data was collected for volumes on the study freeway segments.
- An analysis of the effect of the Project on regional vehicle-miles of travel (VMT) has been added. This analysis was done primarily to provide data needed for the air quality analysis. Readers may be aware that, as a result of Senate Bill 743 (Steinberg, 2013), CEQA analysis of traffic impacts is likely to change at some point in the future from LOS-based to VMT-based. This change will not take effect before January 1st 2020 at the earliest, so the LOS approach that is the primary focus of the current study accords with current state law. The VMT analysis is therefore included in this traffic study for informational purposes only.

  Please note one other change that has no effect on the analysis, which is that Parsons Brinckerhoff Inc. was acquired by WSP USA Inc. So although the company name on the cover of this report is different from that on the previous report, lead traffic engineer and key staff from the previous study also conducted the current study.

6.15.1 Project Impact Findings

The project's effects to traffic and circulation are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project impacts (see Section 4.15 of Revised Final Programmatic EIR Sections (RFPEIRS) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

Could the project:

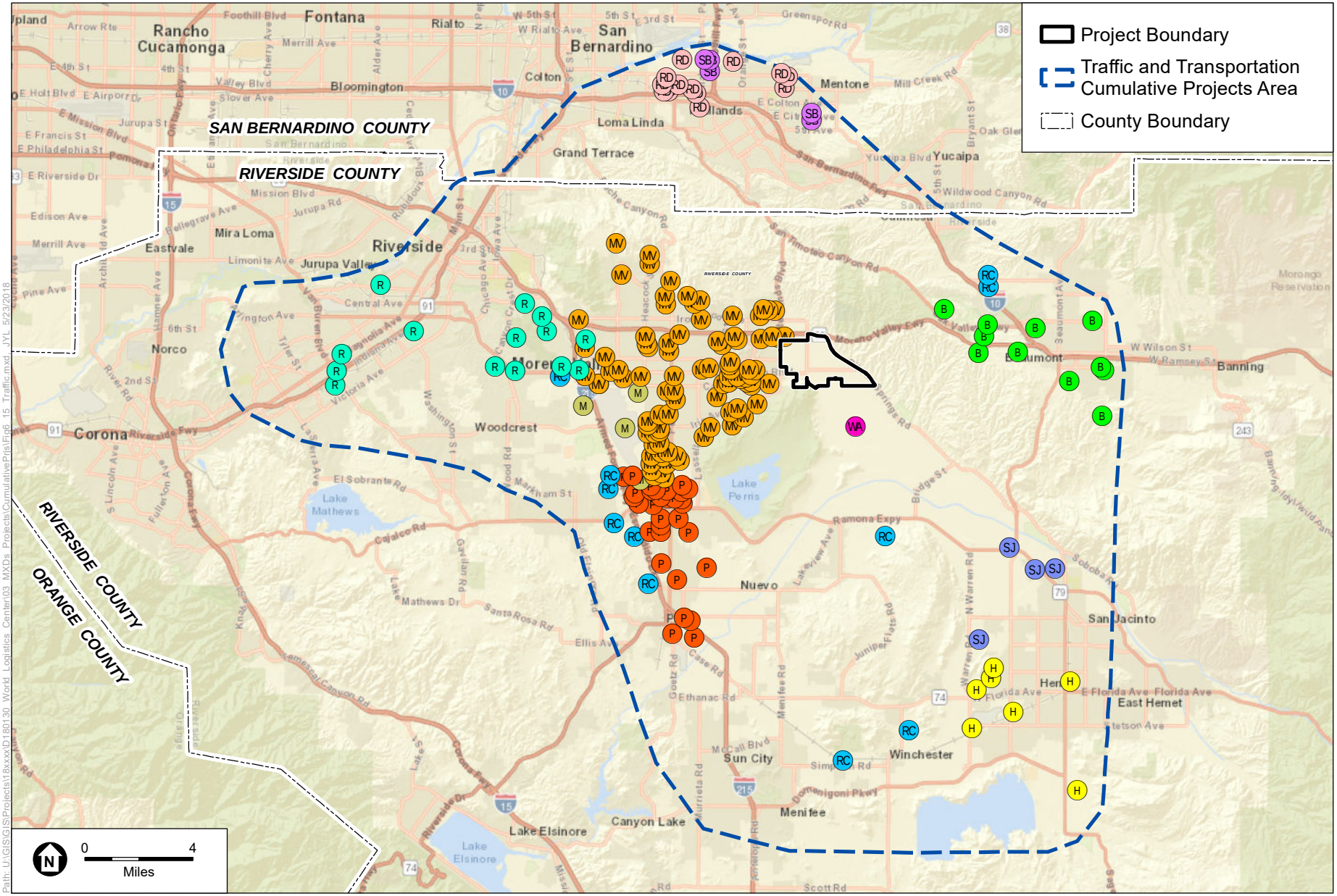
- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit; **Significant and Unavoidable, Section 4.15.6.1.**
- Cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the without project condition. The adopted LOS standards are as follows:
  - Roadway segments and intersections: LOS C; and LOS D as outlined in previously referenced Table 4.15.E. **Significant and Unavoidable, Section 4.15.6.1, Section 4.15.6.2, Section 4.15.6.3, Section 4.15.6.4, Section 4.15.6.5.**

  - Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z. **Significant and Unavoidable, Section 4.15.6.1, Section 4.15.6.2, Section 4.15.6.3, Section 4.15.6.4, Section 4.15.6.5.**
  - Freeway mainline: LOS D. **Significant and Unavoidable, Section 4.15.6.1**, **Section 4.15.6.2, Section 4.15.6.3, Section 4.15.6.4, Section 4.15.6.4, Section 4.15.6.5.**
  - Freeway Ramp Merge/Diverge: LOS D. **Significant and Unavoidable, Section 4.15.6.1, Section 4.15.6.2, Section 4.15.6.3, Section 4.15.6.4, Section 4.15.6.5.**
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways; **Significant and Unavoidable, Section 4.15.6.3, Section 4.15.6.4, Section 4.15.6.5.**
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks; **Less than Significant, Section 4.15.5.1.**
- Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); **Less than Significant, Section 4.15.5.2.**
- Result in inadequate emergency access; **Less than Significant, Section 4.15.5.3.**
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **Less than Significant, Section 4.15.5.4.**

As shown, there are no unmitigated project-specific significant and unavoidable impacts to traffic and circulation identified in the FEIR.

6.15.2 Geographic and Temporal Scope

Cumulative impacts to traffic and transportation could result from the project in conjunction with other past, present and future projects located within the 50 ADT cumulative projects impact area. This area includes the entire City of Moreno Valley and portions of the Cities of Riverside, Redlands, Beaumont, Perris, San Jacinto, Hemet and Calimesa, as well as portions of unincorporated Riverside and San Bernardino County, and the March JPA. Cumulative projects within the identified overall cumulative project area will be evaluated with the project to determine if any cumulative impact would occur. The geographic area for cumulative transportation and traffic impacts is shown on Figure 6.15-1. The projects located within the cumulative transportation and traffic impact area is listed in Table 6.15-1.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.15-1

Traffic and Transportation Cumulative Projects Area

ESA

Table 6.15-1: Traffic and Circulation Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-2	Tournament Hills 3	No project description available.
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park. The project would have a less than significant impact on traffic and circulation with mitigation.
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site. The project would have a significant impact on traffic and circulation.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres. The project would have a less than significant impact on traffic and circulation with mitigation.

Project ID	Project Name	Environmental Document Summary
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses. The project would have a less than significant impact on traffic and circulation with mitigation.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres. The project would have potentially significant impacts on traffic and circulation.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's NOC, the project proposes to develop 178 single-family homes on 51.2 acres. The project would have a less than significant impact on traffic and circulation.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. The project would have a potentially significant impact on traffic and circulation.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 excerpt of an EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. No information in document related to traffic and circulation.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. No information in document on level of impact on traffic and circulation after mitigation.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. The project would have a less than significant impact on traffic and circulation.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. No information in provided documentation on impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. The project would have a less than significant impact on traffic and circulation with mitigation.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR, the project would result in the development of a 130 acre business park. The project would have a significant impact on traffic and circulation.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres. The project would have a significant impact on traffic and circulation.
M-9	TM 34748	Per the March Joint Powers Authority's 2010 ND, the project proposes to build a 135 single-family residential lot subdivision on 40 acres. The project would have a less than significant impact on traffic and circulation.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. The project would have a less than significant impact on traffic and circulation.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. No information in document on level of impact on traffic and circulation after mitigation.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. The project would have a less than significant impact on traffic and circulation.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. The project would have a less than significant impact on traffic and circulation.

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MV-9	TR32459 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project is for a single family residential tract with 11 lots on 13 acres and is zoned R1. The lots range from 41,021 sq ft to 59,627 sq ft in size. The project would have a less than significant impact on traffic and circulation.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots. The project would have a less than significant impact on traffic and circulation.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. The project would have a less than significant impact on traffic and circulation.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. The project would have a less than significant impact on traffic and circulation.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. The project would have a less than significant impact on traffic and circulation.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. The project would have a less than significant impact on traffic and circulation.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. The project would have a less than significant impact on traffic and circulation.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. The project would have a less than significant impact on traffic and circulation.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. The project would have a less than significant impact on traffic and circulation.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. The project would have a less than significant impact on traffic and circulation.

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MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. The project would have no impact on traffic and circulation.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. The project would have a less than significant impact on traffic and circulation.
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. The project would have a less than significant impact on traffic and circulation.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres. The project would have a less than significant impact on traffic and circulation.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. The project would have a less than significant impact on traffic and circulation.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. The project would have a less than significant impact on traffic and circulation.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. The project would have a less than significant impact on traffic and circulation.

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MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. The project would have a less than significant impact on traffic and circulation.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. No information in document on level of impact on traffic and circulation after mitigation.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. No information in document on level of impact on traffic and circulation after mitigation.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres. The project would have a significant, cumulatively considerable impact on traffic and circulation.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. The project would have a significant impact on traffic and circulation.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a hat will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. The project would have a less than significant impact on traffic and circulation.

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MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. The project would have a significant impact on traffic and circulation.
MV-45	Iris Plaza	Per the City of Moreno Valley's IS, the project would construct a 109,289 sq. ft. shopping center on approximately 12.4 acres of land within the Community Commercial (CC) land use district. The project would have a less than significant impact on traffic and circulation.
MV-47	PA07-0129 TR 35606 SFR	No environmental documentation was available for review. However, there is a planning commission resolution, which states that the project is not likely to cause substantial environmental impact.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses. The project would have a significant impact on traffic and circulation.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. The project would have a less than significant impact on traffic and circulation.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site. The project would have a less than significant impact on traffic and circulation.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. The project would have a less than significant impact on traffic and circulation.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. The project would have a less than significant impact on traffic and circulation.

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MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. The project would have a less than significant impact on traffic and circulation.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. The project would have a significant impact on traffic and circulation.
MV-56	Tract Map 33810	No environmental documentation was available for review. However, there is a planning commission resolution that states that the project is exempt from the requirements of CEQA guidelines.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots. The project would have a less than significant impact on traffic and circulation.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The project would have a less than significant impact on traffic and circulation.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. The project would have a less than significant impact on traffic and circulation.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site. The project would have a significant impact on traffic and circulation.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. The project would have a less than significant impact on traffic and circulation.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. The project would have a less than significant impact on traffic and circulation.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. The project would have a less than significant impact on traffic and circulation.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. The project would have a less than significant impact on traffic and circulation.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. The project would have a less than significant impact on traffic and circulation.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2008 ND, the project would build a 522,772 square foot industrial warehouse building on 25.96 acres of land. The project would have a less than significant impact on traffic and circulation.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. The project would have a less than significant impact on traffic and circulation.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2010 ND, the project subdivides 16.9 acres into 6 pads for commercial retail use. The project would have a less than significant impact on traffic and circulation.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. The project would have a less than significant impact on traffic and circulation.
MV-88	TR33771 / Creative Design Associates	No environmental documentation was available for review. However, there is a planning commission resolution for a 12 unit condominium complex on approximately 0.9 acres.
MV-89	TR35663 / Kha	No environmental documentation was available for review. However, there is a notice of exemption for a mixed use development on approximately 2.2 acres, which states that there is no evidence of potential for significant environmental impacts.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. The project would have a less than significant impact on traffic and circulation.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. The project would have a less than significant impact on traffic and circulation.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. The project would have a less than significant impact on traffic and circulation.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. The project would have a less than significant impact on traffic and circulation with mitigation.

Project ID	Project Name	Environmental Document Summary
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. The project would have a less than significant impact on traffic and circulation with mitigation.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. The project would have a less than significant impact on traffic and circulation.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. The project would have a less than significant impact on traffic and circulation.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. The project would have a less than significant impact on traffic and circulation.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. The project would have a less than significant impact on traffic and circulation.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. The project would have a less than significant impact on traffic and circulation.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. Project was exempt from environmental review.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. Project was exempt from environmental review.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres. Project was exempt from environmental review.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. The project would have a less than significant impact on traffic and circulation.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. The project would have a less than significant impact on traffic and circulation.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. The project would have a less than significant impact on traffic and circulation.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. The project would have a less than significant impact on traffic and circulation.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. The project would have a less than significant impact on traffic and circulation.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. The project would have a less than significant impact on traffic and circulation.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. The project would have a significant, cumulative impact on traffic and circulation.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. The project would have a less than significant impact on traffic and circulation.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. The project would have a less than significant impact on traffic and circulation with mitigation.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. The project would have a less than significant impact on traffic and circulation with mitigation.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. The project would have a less than significant impact on traffic and circulation with mitigation.
P-12	Starcrest, P011-0005; 08-11-0006	Per the City of Perris Final EIR, the proposed project is the expansion of an existing internet/mailorder fulfillment facility to an adjacent property. The existing Starcrest building is approximately 232,215 square feet in size. The expansion would include a 454,008 sf building north of and adjacent to Starcrest's existing facility. The project would have a less than significant impact on traffic and circulation.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, proposed project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. The project would have a less than significant impact on traffic and circulation with mitigation.

Project ID	Project Name	Environmental Document Summary
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Final EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. No information in provided document on impact significance after mitigation incorporated.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 excerpt of an EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. No information in provided document on impact significance after mitigation incorporated. The project would have a less than significant impact on traffic and circulation with mitigation.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. The project would have potentially significant impacts on traffic and circulation.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. The project has mitigation measures in place for traffic and circulation impacts, no information on if impacts are significant after mitigation implemented.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. The project would have a less than significant impact on traffic and circulation.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. The project would have a less than significant impact on traffic and circulation.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. The project has mitigation measures in place for traffic and circulation impacts, no information on if impacts are significant after mitigation implemented.

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P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. The project would have a less than significant impact on traffic and circulation.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. The project would have a potentially significant impact on traffic and circulation.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. The project would result in significant cumulative traffic and circulation impacts.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. The project would have significant traffic and circulation impacts related to project-generated traffic and freeway segments.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. The project would have a less than significant impact on traffic and circulation with mitigation.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. The project would have a less than significant impact on traffic and circulation.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
P-37	Cabrillo	Per the City of Perris' Initial Study, the project proposed to amend the General Plan (GP) and Zoning designation of approximately 36.21 acres of land from R-6,000 to MFR-14 Residential, along with a Text Amendment to narrow the lot frontage from 50-feet to 45-feet for lots greater than 4,500 square feet to facilitate the entitlement of Tentative Tract Map (TTM) 36343, a 184 lot residential subdivision. The project would have a less than significant impact on traffic and circulation with mitigation.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres. The project will result in significant impacts to traffic and circulation.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space. The project would have a less than significant impact on traffic and circulation with mitigation.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. The project would have a significant and cumulative impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
R-16	Sycamore Canyon Specific Plan	Per the City of Riverside's 1993 amended Specific Plan/EIR, the Sycamore Canyon Business Park Specific Plan describes a planned industrial park consisting of approximately 920 acres of industrial and commercial uses within a 1,400 acre project area. Approximately 480 acres of the total 1,500 acre Sycamore Canyon Wilderness Park is located within the Plan area. The project would have potential significant impacts on traffic and circulation.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. The project would have significant and cumulative impacts to traffic and circulation.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The project would have significant and cumulative impacts to traffic and circulation.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres. The project would have less than significant impacts on traffic and circulation.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres. The project has mitigation measures in place for traffic and circulation impacts, no information on if impacts are significant after mitigation implemented.

Project ID	Project Name	Environmental Document Summary
RC-12	Cores Industrial Partners	Per Riverside County's October 2010 ND, the project proposes to bring the Zoning Code into compliance with SB 1627 and to strengthen the development standards for wireless telecommunications facilities in order to ensure high-quality design and compatibility with surrounding uses. The project would have less than significant impacts on traffic and circulation.
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres. The project would have less than significant impacts on traffic and circulation with mitigation.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. The project would have a potentially significant impact on cultural resources.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. The project would have a less than significant impact on traffic and circulation with mitigation.
RC-37	TR36504	Per Riverside County's IS, the project proposes a Schedule 'A' subdivision of 162.05 acre gross area into 527 single-family residential lots. In addition to 527 residential lots, the subdivision also includes an 8.54 acre lot for a park, a 4.7 acre lot for a detention/debris basin, and an approximately 18 acre open space lot. The project would have a less than significant impact on traffic and circulation with mitigation.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. The project would have significant impacts to traffic and circulation.

Project ID	Project Name	Environmental Document Summary
RD-1	Tract 18988	Per the City of Redlands' June 2015 MND, the project would widen Pioneer Avenue to preserve existing deodar cedar trees along an approximately 1,100 linear foot segment between Texas Street and Furlow Drive. The project also would develop 82 single-family residential lots on 30.51 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
RD-3	Newland Homes Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the construction of 105 single family detached dwelling units and a neighborhood park on 39.84 acres. The project would have a less than significant impact on traffic and circulation with mitigation.
RD-4	Redlands Pennsylvania Tract	Per the City of Redlands' March 2018 ISMND, the Project would result in the subdivision of a 24.87 acre project site into 67 residential lots and 10 lots as open space. Additionally, the Project seeks approval to remove 5 acres from an Agricultural Preserve. The project would have a less than significant impact on traffic and circulation.
RD-6	Woodsprings Hotel	Per the City of Redlands' March 2018 IS, the Project would result in the construction of a 124-room hotel on a 2.68-acre property. The project would have a less than significant impact on traffic and circulation.
RD-10	Park Ave Industrial Center	Per the City of Redlands' March 2014 MND, the project would develop approximately 170,000 square feet of light industrial uses, including 289 parking spaces and 12, 500 square feet of office space. The project would have a less than significant impact on traffic and circulation with mitigation.
RD-11	Marriott Springhill Suites	Per the August 2016 technical memorandum regarding the Trip Generation, Distribution, and Assignment Analysis for the project, the project would develop a four-story 88-room hotel with rooms, suites, and 97 parking spaces. The project would have a less than significant impact on traffic and circulation.
RD-12	I-10 Redlands LC - B	Per the August 2014 letter responding to comments on the proposed MND, the project would develop approximately 1.1 million square feet for warehousing/ fulfillment/distribution center uses on 50.67 acres. The project would have a less than significant impact on traffic and circulation.
RD-14	Redlands DC 772,000 SF (2015)	Per the City of Redlands' September 2013 MND, the project would develop 771,839 square feet of warehouse distribution center on 35.59 acres and related parking. The project would have a less than significant impact on traffic and circulation with mitigation.

Project ID	Project Name	Environmental Document Summary
RD-16	APL Logistics	Per the May 2012 City of Redlands Commission Review and Approval No. 873, the project would develop 809,338 square feet of warehouse uses on 37.4 acres. The project would have a less than significant impact on traffic and circulation.
SB-1	Redlands Gateway Logistics - B	Per the County of San Bernardino's 2009 IS, the project would result in the construction of 5 two-story structures and 7 single-story structures with a maximum floor area of 216,500 square feet, and a three-story hotel with 180 rooms and a floor area of 80,000 square feet. The project would have a less than significant impact on traffic and circulation.
SB-2	Redlands Gateway Logistics - A	Per the County of San Bernardino's 2014 IS, the project proposes to subdivide 42.66 acres into 2 lots. Parcel 1 is 14.81 acres and Parcel 2 is 27.85. The project would have a less than significant impact on traffic and circulation.
SB-3	Prologis #12	Per the County of San Bernardino's 2013 IS, the project would result in a conditional use permit to establish a 593,916 square-foot industrial building to be use as a "high cube" warehouse distribution facility, a tentative parcel map for a one lot subdivision, and a general plan amendment to change the official land use district from East Valley/General commercial to East Valley/regional industrial on 27.42 acres. The project would have a less than significant impact on traffic and circulation.
SB-4	Prologis #17	Per the County of San Bernardino's April 2014 MND, the Project would result in the construction of a 777,620 square foot industrial building and the relocation of an existing telecommunication tower on a 35.98 acre site. The project would have a less than significant impact on traffic and circulation.
SB-6	Prologis #8	Per the County of San Bernardino's 2007 IS, the project would result in the construction four industrial buildings to be used a "High Cube" and general warehouse distribution facilities. The project would have a less than significant impact on traffic and circulation.
SB-7	Sam Redlands Tract	Per the City of Redlands' March 2017 ISMND, the Project would result in the subdivision of an 11.97 acre site into 34 single family residential lots, 4 lettered lots, and the demolition of existing structures. The project would have a less than significant impact on traffic and circulation.
SB-8	Jacinto Tract	Per the City of Redlands' July 2016 ISMND, the Project would result in the subdivision of an 18.54 acre site into 40 residential lots. The project would have a less than significant impact on traffic and circulation.

Project ID	Project Name	Environmental Document Summary
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. The project would have a less than significant impact on traffic and circulation with mitigation.

6.15.3 Cumulative Impact Evaluation

Cumulative traffic impacts are evaluated in the revised traffic study contained in Appendix F. Identified cumulative traffic impacts and associated mitigation measures are documented in Chapter 11-F of the traffic study, and in the tables identified below. Please refer to Appendix F for the complete discussion of cumulative traffic impacts, mitigation measures, feasibility and level of significance after mitigation.

6.15.3.1 Air Traffic Patterns

Impact: *The project would not contribute to cumulative changes in air traffic patterns.*

Threshold:	Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Cumulative Impact Analysis

The project would not affect air traffic patterns and therefore, would not contribute to any cumulative changes in air traffic patterns.

Significance Level Before Mitigation: No impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: No impact.

6.15.3.2 Design Hazard Features

Impact: *The project would not contribute to the cumulative increases in hazards due to a design feature or incompatible use.*

Threshold:	Would the project substantially increase hazards due to a design feature or incompatible use?

Cumulative Impact Analysis

The project roadway system has been designed to conform to all city of Moreno Valley and professional traffic engineering design requirements. The majority of the larger cumulative projects identified in the cumulative project impact area evaluated cumulative traffic impacts in their respective CEQA documents. The traffic impact analysis prepared for this Revised Sections of the FEIR includes a comprehensive cumulative traffic impact analysis and associated mitigation measures. These cumulative impact mitigation measures are included in this section.

Significance Level Before Mitigation: No impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: No impact.

6.15.3.3 Emergency Access

Impact: *The project would not contribute to the cumulative inadequate emergency access.*

Threshold:	Would the project result in inadequate emergency access?

Cumulative Impact Analysis: The project roadway system has been designed to conform to all city of Moreno Valley and professional traffic engineering design requirements.

Significance Level Before Mitigation: No impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: No impact.

6.15.3.4 Alternative Transportation Policies, Plans, or Programs

Impact: *The project would not contribute to any cumulative conflict with adopted policies, plans, or programs supporting alternative transportation.*

Threshold:	Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Cumulative Impact Analysis

The project roadway system has been designed to conform to all city of Moreno Valley and professional traffic engineering design requirements. The majority of the larger cumulative projects identified in the cumulative project impact area evaluated cumulative traffic impacts in their respective CEQA documents. The traffic impact analysis prepared for this Revised Sections of the FEIR includes a comprehensive cumulative traffic impact analysis and associated mitigation measures. These cumulative impact mitigation measures are included in this section.

Significance Level Before Mitigation: No impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: No impact.

6.15.3.5 Existing with Phase 1 Conditions Traffic and Level of Service

Impact: *The project's contribution to onsite and surrounding circulation system impacts under the Existing with Phase 1 Conditions would be cumulatively considerable.*

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows: – Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C. – Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z. – Freeway mainline: LOS D.

– Freeway Ramp Merge/Diverge: LOS D.

Cumulative Impact Analysis: The majority of the larger cumulative projects identified in the cumulative project impact area evaluated cumulative traffic impacts in their respective CEQA documents. The traffic impact analysis prepared for this Revised Sections of the FEIR includes a comprehensive cumulative traffic impact analysis and associated mitigation measures. These cumulative impact mitigation measures are included in this section. Please refer to Appendix F for the cumulative traffic impact analysis.

Significance Level Before Mitigation: Significant impacts for certain facilities

Mitigation Measures: Please refer to Appendix F and below for mitigation measures.

Significance Level After Mitigation: Less than significant impact.

6.15.3.6 Existing with Project (Buildout) Conditions Traffic and Level of Service

Impact: The project's contribution to onsite and surrounding circulation system impacts under the Existing with Project (Buildout) Conditions would be cumulatively considerable.

Cumulative traffic impacts and mitigation measures have been evaluated for the following scenarios:

- Cumulative Impacts – Roadway Sections
- Cumulative Impacts – Intersections
- Cumulative Impacts – Freeway Impacts

Cumulative traffic impacts and mitigation measures are documented in the tables in Appendix F:

- Cumulative Impacts – Roadway Sections: Appendix F, Table 74
- Cumulative Impacts – Intersections: Appendix F, Table 75
- Cumulative Impacts – Freeway Impacts: Appendix F, Table 76

All cumulative traffic impacts have been reduced to less than significant levels through the application of the identified mitigation measures. Some mitigation measures may be determined to be infeasible and as a result, cause a significant cumulative impact.

Threshold: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit.

A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows:

– Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C.

– Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z.

– Freeway mainline: LOS D.

– Freeway Ramp Merge/Diverge: LOS D.

Cumulative Impact Analysis: **T**he majority of the larger cumulative projects identified in the cumulative project impact area evaluated cumulative traffic impacts in their respective CEQA documents. The traffic impact analysis prepared for this Revised Sections of the FEIR includes a comprehensive cumulative traffic impact analysis and associated mitigation measures. These cumulative impact mitigation measures are included in this section. **P**lease refer to Appendix F for the cumulative traffic impact analysis.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Please refer to Appendix F and below for mitigation measures

Significance Level After Mitigation: Less than significant impact.

6.15.3.7 Year 2025 With Phase 1 Conditions Traffic and Level of Service Impacts

Impact: *The project's contribution to onsite and surrounding circulation system impacts under the Year 2025 With Phase 1 Conditions would be cumulatively considerable.*

Cumulative traffic impacts and mitigation measures have been evaluated for the following scenarios:

- Cumulative Impacts – Roadway Sections
- Cumulative Impacts – Intersections
- Cumulative Impacts – Freeway Impacts

Cumulative traffic impacts and mitigation measures are documented in the tables in Appendix F:

- Cumulative Impacts – Roadway Sections: Appendix F, Table 74
- Cumulative Impacts – Intersections: Appendix F, Table 75
- Cumulative Impacts – Freeway Impacts: Appendix F, Table 76

All cumulative traffic impacts have been reduced to less than significant levels through the application of the identified mitigation measures. Some mitigation measures may be determined to be infeasible and as a result, cause a significant cumulative impact.

Threshold: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit.

Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows:

– Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C.

- Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z.
- Freeway mainline: LOS D.
- Freeway Ramp Merge/Diverge: LOS D.

Cumulative Impact Analysis: The majority of the larger cumulative projects identified in the cumulative project impact area evaluated cumulative traffic impacts in their respective CEQA documents. The traffic impact analysis prepared for this Revised Sections of the FEIR includes a comprehensive cumulative traffic impact analysis and associated mitigation measures. These cumulative impact mitigation measures are included in this section. Please refer to Appendix F and Tables 6.15-1 and 6-15-2 for the cumulative traffic impact analysis.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Please refer to Appendix F and below for mitigation measures.

Significance Level After Mitigation: Less than significant impact.

6.15.3.8 Year 2040 Cumulative with Project Conditions Traffic and Level of Service Impacts

Impact: The project's contribution to onsite and surrounding circulation system impacts under the Year 2040 Cumulative with Project Conditions would be cumulatively considerable.

Cumulative Impacts to Roadway sections, Intersections and Mitigation Measures are summarized in Tables 6.15-2 and 6.15-3, and in the text following the tables.

Table 6.15-2: Cumulative Impacts to Roadway Sections and Mitigation Measures

Study Roadway		From	To	Jurisdiction	LOS Standard*	Existing LOS	Existing Plus Build-out LOS	Does the Project have a Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	Is the Mitigation Feasible?	LOS After Feasible Mitigations are Implemented	Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
(A)				(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
Road Section Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)														
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	Riverside County	D	**F**	**F**	Yes	Widen to 8 lanes	No	**F**	Yes	Yes	N/A**

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Not applicable because mitigation is infeasible

Indicates LOS exceeds the target level

Table 6.15-3: Cumulative Intersection Impacts and Mitigation Measures

ID	Study Intersection	LOS Standard	2040 No Project			2040 Plus Build-out			2040 No Project			2040 Plus Build-out			Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Existing Plus Phase 1				
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour		Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour			Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS		Delay	LOS		Delay	LOS		Delay	LOS			Delay	LOS	Delay	LOS
IN-12	Theodore Street/Ironwood Avenue	D	CSS	25.8	D	CSS	92.9	**F**	CSS	48.0	**E**	CSS	>180	**F**	Signalize.	SIGNAL	10.7	B	10.9	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	29.5	C	SIGNAL	50.4	**D**	SIGNAL	37.1	**D**	SIGNAL	42.6	**D**	Add 1 EB LT lane. Change NB RT to NB Through-RT.	SIGNAL	28.7	C	36.9	D
IN-27	Redlands Blvd/Cactus Ave	C	AWS	32.3	**D**	AWS	>180	**F**	AWS	26.5	**D**	AWS	>180	**F**	Signalize. Add 1 EB LT and 2 WB LT lanes. Add 1 NB LT and 1 SB LT.	SIGNAL	18.0	B	34.5	C
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	57.5	**E**	SIGNAL	65.8	**E**	SIGNAL	40.4	D	SIGNAL	34.9	C	Change E/W from protected to split phase. Convert WB Through to WB LT-Through.	SIGNAL	26.4	C	25.6	C
IN-32	Sunnymead Blvd/Perris Blvd	D	SIGNAL	54.2	D	SIGNAL	37.4	D	SIGNAL	81.1	**F**	SIGNAL	96.1	**F**	Add 1 WB RT pocket.	SIGNAL	36.9	D	63.7	E
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	125.7	**F**	CSS	25.2	D	CSS	16.9	C	CSS	30.4	**D**	Signalize. Add 1 WB LT lane.	SIGNAL	7.1	A	14.4	B
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	64.4	**E**	SIGNAL	64.7	**E**	SIGNAL	51.5	D	SIGNAL	40.4	D	Add 1 WB LT and 1 SB LT lane.	SIGNAL	44.7	D	29.0	C
IN-41	Lasselle St/Iris Ave	D	SIGNAL	61.9	**E**	SIGNAL	64.4	**E**	SIGNAL	142.6	**F**	SIGNAL	137.9	F	Add 1 WB LT lane (resulting 3 turn lanes), and 1 EB RT Need to widen Lasselle in the SB to have 3 receiving lanes.	SIGNAL	51.8	D	84.6	F
IN-51	Nason St/Alessandro Blvd	D	SIGNAL	87.5	**F**	SIGNAL	78.7	E	SIGNAL	92.0	**F**	SIGNAL	95.3	**F**	Add permissive / overlap phase for EB RT, SB RT, and WB RT.	SIGNAL	58.5	E	71.4	E
IN-52	Kitching St/Cactus Ave	C	SIGNAL	43.9	**D**	SIGNAL	46.7	**D**	SIGNAL	68.5	**E**	SIGNAL	75.7	**E**	Change SB RT Lane to SB Through-RT Lane	SIGNAL	39.5	D	46.2	D
IN-53	Lasselle St/Cactus Ave	C	SIGNAL	26.8	C	SIGNAL	33.4	C	SIGNAL	52.9	**D**	SIGNAL	72.7	**E**	Add 1 WB LT lane.	SIGNAL	25.5	C	46.4	D
IN-54	Morrison St/Cactus Ave	D	SIGNAL	39.5	D	SIGNAL	49.1	D	SIGNAL	74.8	**E**	SIGNAL	89.9	**F**	Add 1 WB RT pocket with overlap phasing.	SIGNAL	35.4	D	64.0	E
IN-55	Nason St/Cactus Ave	D	SIGNAL	>180	**F**	SIGNAL	>180	**F**	SIGNAL	>180	**F**	SIGNAL	>180	**F**	Convert 1 SB Through-RT to 1 SB RT, and add permissive / overlap phase at SB RT.	SIGNAL	124.6	F	150.3	F
IN-64	Indian St/Cactus Ave	C	SIGNAL	51.1	**D**	SIGNAL	53.0	**D**	SIGNAL	77.9	**E**	SIGNAL	72.5	E	Add 1 NB LT pocket	SIGNAL	50.7	D	59.4	E
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	64.5	**E**	SIGNAL	65.5	**E**	SIGNAL	60.3	**E**	SIGNAL	62.5	**E**	Add 1 EB RT pocket, 1 SB LT pocket, and NB RT overlap phase.	SIGNAL	64.3	E	55.6	E
IN-71	Elsworth St/Alessandro Blvd	D	SIGNAL	44.3	D	SIGNAL	42.0	D	SIGNAL	90.4	**F**	SIGNAL	93.3	**F**	Add 1 NB LT pocket	SIGNAL	31.4	C	57.0	E
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	152.3	**F**	SIGNAL	156.8	**F**	SIGNAL	>180	**F**	SIGNAL	>180	**F**	Change NB approach to one LT and 1 shared LT/RT lane. Change EB approach to two through and 1 RT lane (150 ft storage)	SIGNAL	48.0	D	44.9	D
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	76.2	**E**	SIGNAL	109.8	**F**	SIGNAL	176.6	**F**	SIGNAL	>180	**F**	Change NB approach to one LT and 1 shared through/RT lane and 1 RT lane. Change EB approach to one LT, 2 through, 1 through/RT and 1 RT lane	SIGNAL	33.8	D	39.7	D

ID	Study Intersection	LOS Standard	2040 No Project			2040 Plus Build-out			2040 No Project			2040 Plus Build-out			Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Existing Plus Phase 1				
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour		Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour			Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS		Delay	LOS		Delay	LOS		Delay	LOS			Delay	LOS	Delay	LOS
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	>180	**F**	SIGNAL	>180	F	SIGNAL	>180	**F**	SIGNAL	>180	**F**	Add EB LT. Add NB TH lane. Change WB to 2 LT, 3 Th and RT lane (300 ft storage). Change SB to 1 RT (100 ft storage), 2 Th and 1 LT	SIGNAL	174.4	F	183.6	F
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	106.4	**F**	SIGNAL	110.3	**F**	SIGNAL	>180	**F**	SIGNAL	>180	F	Change EB approach to 1 LT, 2 THs and 1 RT. Change SB approach to 2 LTs, 2 THs and 1 RT. Add one WB LT lane. Add one NB LT lane.	SIGNAL	78.4	E	141.7	F
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	49.8	D	SIGNAL	57.2	**E**	SIGNAL	48.2	D	SIGNAL	48.3	D	Change NBR to pm+ov	SIGNAL	19.2	B	38.9	D
IN-93	Horace St/Arlington Ave	D	SIGNAL	79.0	**E**	SIGNAL	77.0	E	SIGNAL	54.2	D	SIGNAL	59.1	**E**	Change EB approach to 1	SIGNAL	70.8	E	46.3	D
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	>180	**F**	SIGNAL	>180	**F**	SIGNAL	>180	**F**	SIGNAL	>180	F	Change WB approach to one left (375 ft storage - existing), 2 through and 1 right (100 ft storage). Add one more EB LT lnae (195 ft storage)	SIGNAL	185.4	F	215.7	F
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	131.5	**F**	SIGNAL	137.1	**F**	SIGNAL	>180	**F**	SIGNAL	>180	**F**	Reconfigure SB approach to 1 LT, 3 THs and 1 RT lane.	SIGNAL	119.1	F	209.7	F
IN-101	Ramona Expy/Indian St	E	SIGNAL	137.9	**F**	SIGNAL	160.6	**F**	SIGNAL	159.2	**F**	SIGNAL	163.0	**F**	Add 1 EB RT. Add 2nd NB LT and 1 NB RT. Provide signal phase overlap for all RTs.	SIGNAL	124.2	F	92.0	F
IN-107	Evans Rd/Rider St	C	SIGNAL	68.3	**E**	SIGNAL	68.4	**E**	SIGNAL	39.4	**D**	SIGNAL	34.0	C	Reconfigure SB approach to include 1 LT, 2 THs and 1 RT.	SIGNAL	63.6	E	29.2	C
IN-123	Gilman Springs Rd/Bridge St	C	CSS	>180	**F**	CSS	>180	**F**	CSS	>180	**F**	CSS	>180	F	Signalize. Change EB to EB LT and RT (100 ft storage)	SIGNAL	17.0	B	91.6	F
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	>180	**F**	CSS	133.4	F	CSS	>180	**F**	CSS	>180	**F**	Signalize.	SIGNAL	41.7	D	10.7	B
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	58.9	**E**	SIGNAL	55.1	E	SIGNAL	167.2	**F**	SIGNAL	173.6	**F**	Reconfigure EB approach to 2 LTs, 2 THs and 1 RT. Reconfigure NB approach to 1 LT, 2 THs and 1 RT. change EB & WB lefts to protected.	SIGNAL	63.7	E	105.6	F

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

When refering to lanes, "T" demotes a through lane

When refering to lanes, "L" demotes a left-turn lane

When refering to lanes, "R" demotes a right-turn lane

Cumulative Impacts on Study Intersections and Mitigation Measures

The project's cumulative impacts on study intersections is summarized in Table 6.15.2, and described in detail below:

- **Theodore St./Ironwood Ave. intersection** (IN-12) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Signalizing the intersection would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Moreno Beach Dr./Cactus Ave. intersection** (IN-25) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Constructing a second eastbound left-turn lane and changing a northbound through lane to a shared through-right-turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Redlands Blvd./Cactus Ave. intersection** (IN-27) should be signalized and added eastbound and westbound left-turn lanes in the short term (see previous section on direct impacts) and may exceed the target LOS threshold at some point in the 2025-to-2040 period. Constructing a northbound left-turn lane and a southbound left turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Moreno Beach Dr./John Kennedy Dr.** (IN-28) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the east/west directions from protected to split phase and converting a westbound through lane to a share through-left-turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Sunnymead Blvd./Perris Blvd.** (IN-32) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a westbound left turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Moreno Beach Dr./Locust Ave. intersection** (IN-35) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Signalizing the intersection and constructing a westbound left-turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Iris Ave./Perris Blvd. intersection** (IN-39) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Constructing a second westbound left-turn lane and a second southbound left-turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Lasselle St./Iris Ave. intersection** (IN-41) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a third westbound left-turn lane and an eastbound right-turn lane would reduce project impacts to a less-than-significant level. This improvement is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact.

- **Nason St/Alessandro Blvd.** (IN-51) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a permissive overlap phase for the eastbound right turn, southbound right turn, and westbound right turn would reduce cumulative impacts to a less-than-significant level. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact.
- **Kitching St./Cactus Ave.** (IN-52) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the southbound right turn lane into a shared southbound through-right-turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Lasselle St./Cactus Ave.** (IN-53) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a westbound left turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact.
- **Morrison St./Cactus Ave.** (IN-54) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a westbound right turn lane with overlap phasing would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Nason St./Cactus Ave.** (IN-55) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the southbound shared through-right-turn lane into a right turn lane with overlap phasing would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Indian St./Cactus Ave.** (IN-64) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a northbound left turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Perris Blvd./Cactus Ave.** (IN-65) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding an eastbound right turn lane, a southbound left turn lane, and a northbound right turn overlap phase would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact.
- **Elsworth St./Alessandro Blvd.** (IN-71) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding a northbound left turn lane would reduce cumulative impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. This intersection is eligible for funds under the DIF program, which is expected to provide the remaining funds needed to implement the improvement.
- **Central Ave./Lochmoor Dr. intersection** (IN-75) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Converting the northbound approach to one left-turn lane and a shared left-right-turn lane and changing the eastbound approach to two through lanes and one right turn lane would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Alessandro Blvd./Mission Grove Pkwy. intersection** (IN-80) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Adding an eastbound left turn lane and a northbound through lane, and changing the westbound approach to have two left turn lanes, three through lanes, and one right turn lane3, and changing the southbound approach to one right turn, two through, and one left turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Central Ave./Canyon Crest Dr. intersection** (IN-88) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the eastbound approach to one left turn, two through, and one right turn lane, changing the southbound approach to two left turn, two through, and one right turn lane, adding a westbound left-turn lane, and a northbound left-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Arlington Ave./Indiana Ave./SR-91 northbound ramps** (IN-91) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the northbound right turn to permissive with an overlap phase would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Horace St./Arlington Ave.** (IN-93) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the eastbound approach to one left, two through, and one right turn lane would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Arlington Ave./Victoria Ave. intersection** (IN-94) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Changing the westbound approach to one left, two through, and one right turn lane, and adding an eastbound left turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Alessandro Blvd./Chicago Ave**. **intersection** (IN-95) is already built out to near the practical limit before grade separation is required (it has five lanes for each approach). Despite this it already operates at LOS "F" in the PM peak period. Reconfiguring the southbound approach to one left turn, three through, and one right turn would mitigation the Project's cumulative impact but still result in LOS "F" during peak hours. There are established residential communities on each corner that would be impacted by such a widening or by grade separation. These mitigation measures are thus likely to be infeasible, and the project impact at this location is therefore considered to be a significant and unavoidable.

- **Ramona Expwy./Indian St. intersection** (IN-101) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Constructing one eastbound right-turn lane, a second northbound left-turn lane, and one northbound right-turn lane, and modifying the traffic signal to provide overlap phasing for all right-turn movements would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Perris. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Perris and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Evans Rd./Rider St. intersection** (IN-107) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Reconfiguring the southbound approach to have one left turn, two through, and one right turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Perris. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work

with the City of Perris and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Gilman Springs Rd./Bridge St. intersection** (IN-123) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Signalizing the intersection and having eastbound left and right turn lanes would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **SR-79 (Sanderson Ave) SB/Gilman Springs Rd.** (IN-125) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Signalizing the intersection would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval if the Riverside County has a fair share program in effect at the time of approval that would provide the remaining funds needed to construct the improvements. However, because intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **W. 6th St./Beaumont Ave. intersection** (IN-130) will exceed the target LOS threshold at some point in the 2025-to-2040 period. Reconfiguring the eastbound approach to two left, two through, and one right turn, and reconfiguring the northbound approach to one left, two through and one right turn, and making the eastbound and westbound left turns protected movements would reduce cumulative impacts to a less-than-significant level.

  There are established commercial buildings on the corners on the northern part of the intersection that would be impacted by such a widening. These mitigation measures are thus infeasible, and the project impact at this location is therefore considered to be significant and unavoidable.

Cumulative Freeway Impacts and Mitigation Measures

The WLC's cumulative impacts on the freeways system are described in detail below:

Cumulative Impacts on Mainline Basic Sections

- **Eastbound SR-60 from Reservoir St. to Ramona Ave.** (F-2) will exceed the target LOS threshold at some point in the 2025-to-2040 period and traffic density would increase under 2040 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.
  The state freeway system is owned and operated by Caltrans and is thus outside the jurisdiction of the City of Moreno Valley. The City will work with Caltrans to establish a mechanism for collecting funds from developers for use in funding needed freeway improvements. However, since at the present time no such mechanism exists that would ensure that WLC funds contributed to Caltrans or any other state agency would be used to implement specific improvements that mitigate WLC

The following general mitigation measures apply to the implementation of the above outlined specific mitigation measures:

4.15.7.4A: A traffic impact analysis ("TIA"), conforming to the guidelines for TIAs adopted by the City shall be submitted in conjunction with each Plot Plan application within the WLCSP. Prior to the approval of Plot Plans, the City shall review the Revised TIA to determine if any of the traffic improvements listed in the above tables need to be implemented as part of the plot plan. The TIA prepared for the Revised Sections of the FEIR are required to be completed prior to the issuance of a certificate of occupancy for each building. If the City determines that any of the improvements within Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated into insignificance, then the completion of construction of the improvements prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. Construction of improvements within the City shall be subject to reimbursement agreement for those costs that exceed the fair share contribution determined for the specific Plot Plan application. If the City determines that any of the improvements outside Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated to a less than significant level, then the payment of any necessary fair share contribution as prescribed in MM 4.15.7F prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. If the City determines that the traffic impacts which will result from the construction or operation of a building will be significantly more adverse than those shown in the Revised TIA, further environmental review shall be conducted prior to the approval of the Plot Plan pursuant to Public Resources Code § 21166 and CEQA Guidelines § 15162 to determine what additional mitigation measures, if any, will be required in order to maintain the appropriate levels of service.

4.15.7.4B: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the dedication of appropriate right-of-way, where feasible, consistent with the Subdivision Map Act for frontage street improvements contained within the World Logistics Center Specific Plan Circulation Map. Required dedications shall be made prior to the issuance of occupancy permits for the requested development.

4.15.7.4C: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the Applicant to construct or to fully fund the transportation measures identified in the development's TIA (see MM4.15.7.4A) as needed to mitigate the transportation impacts within the city of the Plot Plan development. The payment or construction shall be made prior to the issuance of occupancy permits for the requested development. This condition shall apply only to mitigation measures where a mechanism has been established to collect funds from the project and any other funds to needed to complete the improvements.

4.15.7.4D: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require each project to pay the requisite Transportation Uniform Mitigation Fee (TUMF) as set forth in Municipal Code Chapter 3.44. Required TUMF payments shall be made prior to the issuance of occupancy permits for the requested development.

4.15.7.4E: In order to ensure that all of the Project's traffic impacts are mitigated to the greatest extent feasible, the Applicant shall contribute its fair share of the cost of the needed traffic improvements that are not within the City as identified in the Traffic Impact Analysis, i.e., under the jurisdiction of other cities, the County of Riverside or Caltrans, pursuant to MM Trans-6. As used in this mitigation measure, the Applicant's "fair share" has been determined in compliance with the requirements of the Fee Mitigation Act, Government Code § 66000 et seq., and, pursuant to § 66001(g), does not require that the Applicant be responsible for making up for any existing deficiencies. Mitigation measures are summarized in Tables 4.15-1 to 4.15-13.

4.15.7.4F: The Applicant shall pay its portion of the fair share of the cost of traffic improvements identified in the Transportation Impact Analysis for those significantly impacted road segments and intersections for each warehouse building within the World Logistics Center if the impacted jurisdiction has established a fair share contribution program prior to the approval of a building-specific plot plan. The City shall determine whether a fair share program exists in the impacted jurisdiction and, if one does exist, require that the appropriate fees are paid by the Applicant, consistent with the requirements below, prior to the issuance of a certificate of occupancy for the building in question. If no fair share program exists or if the existing programs are not consistent with the requirements below, then no payment of fees shall be required. The impacts are to be determined on a road segment or intersection basis. Nothing in this condition requires the payment of a traffic impact fee imposed by another jurisdiction which covers improvement to facilities where the Project does not have a significant impact. Fair-share contributions will be determined on a building-by-building basis as a share of the impact of the Project as a whole (for each segment or intersection where the WLC project as a whole has a significant impact identified in the Revised Sections of the FEIR) as determined by the Revised Traffic Impact Analysis and will be due as each certificate of occupancy is issued. The fair share payments for the significantly impacted road segments and intersections identified in the Revised Sections of the FEIR will be required even though the impact resulting from a specific building does not, by itself, cause a significant impact.

For example, the intersection of Martin Luther King Blvd. and the I-215 northbound ramps (Intersection IN-85) in the City of Riverside was identified as a place where the WLC contributes to cumulatively significant impacts, and where the fair share contribution of the WLC project as a whole was computed to be 0.6%. If the City of Riverside establishes a fair share contribution program consistent with this MM to improve that intersection, then when a certificate of occupancy is to be issued for a 2-million sq. ft. high-cube warehouse in the WLC (approximately 5% of the entire WLC project) the amount of the fair share payment due from the Applicant to the City of Riverside would be computed as follows:

Amount Due	=	Total cost of Improvement	*	Total WLC fair Share (0.6%) as determined by TIA	* % attributable to the building that is subject to the certificate of occupancy (5%)

A similar calculation would be done for each subsequent building, with payments for each due at the time of issuance of the certificate of occupancy. As a result, while each building individually would not produce a significant impact, and therefore would not be required to pay any mitigation fees if considered by itself, the total amount of the payments for all of the buildings would be equal to the fair share payment for the entire WLC to the extent that the responsible jurisdiction has chosen to adopt a fair share contribution funding program consistent with MM 4.15.7.4F.

4.15.7.4G: City shall work directly with WRCOG to request that TUMF funding priorities be shifted to align with the needs of the City, including improvements identified in this TIA. Toward this end, City shall meet regularly with WRCOG.

Level of Significance after Mitigation: The mitigation measures described above can be usefully grouped into four categories based on who is responsible for the facility, which is the primary determinant of the level of significance after mitigation. The four categories are as follows:

On-Site Improvements – These are changes to the road system within the WLC project site that are being undertaken as part of the WLC project. The developer shall be responsible for constructing the improvements described in the section “Proposed Road Network” in Chapter 4 above in accordance with City standards for roadway construction and the roadway cross-sections in the proposed Specific Plan. Completion of these improvements shall constitute the developer’s mitigation of the project’s on-site impacts. When these improvements are

completed the project's impacts on the roadway system within the WLC project site will be mitigated to a less-than-significant level.

Off-Site Improvements for Non-TUMF Roads Under the Jurisdiction of the City of Moreno Valley - These are improvements to public streets in Moreno Valley that are outside the area covered by the proposed WLC Specific Plan Amendment. The developer shall be responsible for paying the DIF as set forth in Municipal Code Chapter 3.42 which the City shall use to implement the mitigation measures identified in Tables 6.15-1 and 6-15-2. The developer shall also be required to pay its fair share of the improvements to City streets that are not in the DIF program where there are significant project impacts. These payments shall constitute the developer's mitigation of project impacts on this category of roads. When these improvements are completed the project's impacts on the City roadway system will be mitigated to a less-than-significant level.

Off-Site Improvements to TUMF Facilities – These are improvements to roads that are part of the TUMF Regional System of Highways and Arterials, some of which are under the jurisdiction of Moreno Valley and others are located in other jurisdictions. The developer shall be responsible for paying the TUMF fees in effect at the time of approval. These payments shall constitute the developer's mitigation of project impacts to this category of roads.

The City shall implement the mitigation measures identified in Tables 6.15-1 and 6.15-2. to TUMF facilities under the City's jurisdiction. When these improvements are completed the project's impacts on the roadway system within the WLC project site will be mitigated to a less-than-significant level.

The City shall work with the other member agencies of WRCOG to program TUMF funds to implement the mitigation measures outside the jurisdiction of the City of Moreno Valley. To the extent that TUMF fees provided by the developer are used to implement the recommended improvements the project's impacts would be less-than-significant. However, because the City does not have direct control over TUMF funding the City cannot ensure that the identified improvements would be made. Thus at this point the project's impacts on these facilities must be considered significant and unavoidable.

Off-Site Improvements to Roads Outside the Jurisdiction of the City and Not Part of the TUMF Program – This category includes all of the recommended mitigation measures that are under the jurisdiction of Riverside County, Caltrans, and other municipalities and that are not included in the TUMF Regional System of Highways and Arterials.

At this time the City does not have cooperative agreements with neighboring jurisdictions that would serve as a mechanism for collecting and distributing developer funds to cover the cost of cross-jurisdictions mitigation measures, other than the TUMF program. The City shall therefore work with the City of Redlands and Riverside County to collect funds from the developer and to implement the signalization of the San Timoteo Rd./Alessandro Rd. intersection and the San Timoteo Rd./Live Oak Canyon intersection (respectively). The City shall also work with the City of Riverside to collect a fair-share contribution from the developer to signalize the Martin Luther King Blvd./I-215 northbound ramp intersection. To the extent that the City is able to establish such a mechanism (as described in MM Trans-6) and the other jurisdiction constructs the recommended improvement the project's impacts would be less-than-significant. However, because the City cannot guarantee that such a mechanism will be established and does not have direct control over facilities outside of its jurisdiction the City cannot ensure that the identified improvements would be made. Thus at this point the project's impacts on these facilities must be considered significant and unavoidable.

Similarly, the City has not entered into an agreement with Caltrans for the collection of developer payments for improvements to the state highway system other than freeway interchange improvements funded through the TUMF program. Nor has Caltrans established

a program to collect fair-share contributions to freeway improvements such as those identified instead, Caltrans has traditionally relied on other means to fund freeway improvements; means involving multiple stages of review and input from other agencies, with priorities and constraints applied at each stage, that preclude a direct connection between developer-provided fair-share funds and specific highway improvements.

Decisions on funding for improvements to the state highway system are made by four bodies, namely[1]:

> Legislature: Establishes overall policies, including determining funding sources and distribution, and spending priorities through state statutes such as Revenue and Taxation Code, Streets and Highways Code, and Government Code. The Legislature appropriates funds through the annual budget for transportation projects and has authority to designate transportation projects statutorily.
>
> California Transportation Commission (CTC): The nine-member CTC, appointed by the Governor, reviews and adopts the state transportation programs and approves projects nominated by Caltrans and regional agencies for funding. The CTC recommends policy and funding priorities to the Legislature and is also responsible for project delivery oversight.
>
> California Department of Transportation (Caltrans): Caltrans owns, operates and maintains the state highway system. Caltrans plans, designs, and nominates interregional capital improvement projects on the state highway system and also manages the intercity rail operation.
>
> Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs): MPOs and RTPAs are responsible for planning, coordinating and administering funds for regional transportation systems. In California, 17 MPOs and 48 RTPAs develop 20-year Regional Transportation Plans (RTPs) as well as 5-year Regional Transportation Improvement Program (RTIP), which identify projects for the regional portion of the State Transportation Improvement Program (STIP). SCAG is the MPO for Riverside County.

Most funds for improvements to the state highway system come through the State Highway Account (SHA), which receives funding from a variety of sources including:

- motor vehicle fuel taxes, part of which goes into the Highway Users Tax Account, a portion of which goes to the SHA and the rest goes to cities and counties according to a statutory formula.

- The fuel tax swap, enacted in 2011 (Fuel Tax Swap Fix), reenacted the provisions of the Fuel Tax Swap of 2010 addressing issues raised by the passage of Propositions 22 and 26. The Fuel Tax Swap eliminated the state sales tax on gasoline and instead imposed an additional excise tax on gasoline of 17.3¢ (July 2010). The increase in the excise tax would generate revenues equivalent to what would have been collected from the state sales tax on gasoline. These revenues are intended for new road construction (STIP), highway maintenance and operations (SHOPP), and local roadways.

[1] This information came from *Transportation Funding in California*, Caltrans Economic Analysis Branch, 2011, page 2.

- the federal fuel tax, which goes into the Highway Trust fund for use on the portions of the system that are designated ad federal aid highways.

In addition, local sales tax measures, such as Measure A in Riverside County, and the proceeds of Proposition 1B provide funding for improvements to certain portions of the state highway system.

The key feature of this system pertaining to the recommended freeway mitigation measures is that this system is outside the control of the City of Moreno Valley. The City shall work with Caltrans to establish a mechanism for collecting funds from developers for use in funding needed freeway improvements (as described in MM Trans-6). However, since at the present time no such mechanism exists that would ensure that WLC funds contributed to Caltrans or any other state agency would be used to implement specific improvements that mitigate WLC impacts, and there is no mechanism by which the City can construct or guarantee the construction of any improvements to the freeway system by itself, the project's impacts on the state highway system must be considered significant and unavoidable.

Cumulative traffic impacts and mitigation measures have been evaluated for the following scenarios:

- Cumulative Impacts – Roadway Sections
- Cumulative Impacts – Intersections
- Cumulative Impacts – Freeway Impacts

Cumulative traffic impacts and mitigation measures are documented in the tables in Appendix F:

- Cumulative Impacts – Roadway Sections: Appendix F, Table 74
- Cumulative Impacts – Intersections: Appendix F, Table 75
- Cumulative Impacts – Freeway Impacts: Appendix F, Table 76

All cumulative traffic impacts have been reduced to less than significant levels through the application of the identified mitigation measures. Some mitigation measures may be determined to be infeasible and as a result, cause a significant cumulative impact.

Threshold:	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows: – Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C. – Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.Z.

– Freeway mainline: LOS D.

– Freeway Ramp Merge/Diverge: LOS D.

Cumulative Impact Analysis: Please refer to Appendix F for the cumulative traffic impact analysis.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Please refer to Appendix F and below for mitigation measures.

Significance Level After Mitigation: Less than significant impact.

6.15.3.9 Freeway Impacts from Truck Trips to the Ports of Los Angeles and Long Beach

Impact: *The project's contribution to freeway impacts from truck trips to the Ports of Los Angeles and Long Beach would be cumulatively considerable.*

Cumulative traffic impacts and mitigation measures have been evaluated for the following scenarios:

- Volumes Along Routes to Ports
- Cumulative Impacts – Roadway Sections
- Cumulative Impacts – Intersections
- Cumulative Impacts – Freeway Impacts

Cumulative traffic impacts and mitigation measures are documented in the tables in Appendix F:

- Volumes Along Routes to Ports: Appendix F, Tables 87-98
- Cumulative Impacts – Roadway Sections: Appendix F, Table 74
- Cumulative Impacts – Intersections: Appendix F, Table 75
- Cumulative Impacts – Freeway Impacts: Appendix F, Table 76

All cumulative traffic impacts have been reduced to less than significant levels through the application of the identified mitigation measures. Some mitigation measures may be determined to be infeasible and as a result, cause a significant cumulative impact.

Threshold: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit.

Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

A significant project-specific traffic impact would occur if the project would cause a decrease from satisfactory LOS (based on local agency adopted standards) to an unsatisfactory LOS on a study area intersection, roadway segment, freeway mainline lane, freeway weaving segment or freeway ramp. A significant cumulative traffic impact would occur if the project contributes traffic toward those facilities operating at unsatisfactory LOS in the pre-project condition. The adopted LOS standards are as follows:

– Roadway segments: LOS C and LOS D as outlined in previously referenced Tables 4.15.B and 4.15.C.

- Intersections: LOS C and LOS D as outlined in previously referenced Table 4.15.2.
- Freeway mainline: LOS D.
- Freeway Ramp Merge/Diverge: LOS D.

Cumulative Impact Analysis: Please refer to Appendix F for the cumulative traffic impact analysis.

Significance Level Before Mitigation: Significant impact.

Mitigation Measures: Please refer to Appendix F and below for mitigation measures.

Significant Level After Mitigation: Less than significant impact.

Mitigation Measure Summary

Based on the analysis described above following Mitigation Measures are required:

6.16 Utilities and Service Systems

Cumulative effects to utilities and service systems are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to utilities and service system issues is provided in Section 6.16.1. The geographic and temporal scopes for utilities and service systems is provided in Section 6.16.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the utilities and service systems issues are discussed in Section 6.16.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 6.16.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts. The cumulative projects identified in Tables 6.16-1 and 6.16-2, and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if their impacts would cause or contribute to a significant cumulative impact and, if so, whether the project's incremental impact would be cumulatively considerable.

6.16.1 Project Impact Findings

The project's effects to utilities and service systems are summarized in this section, and the impacts have been evaluated against the following thresholds that were developed based on the CEQA Guidelines Appendix G thresholds, as modified to address potential project impacts. After each threshold, a significance determination for the project's impacts (see Section 4.16 of the Revised Sections of the FEIR) is provided as well as a reference to the specific section and impact number if the impact determination is significant.

6.16.1.1 Water Supply

Would the project:

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; **Less than Significant, Section 4.16.1.5.1.**

- Have insufficient water supplies available to serve the project from existing entitlements and resources, or need new or expanded entitlements. **Less than Significant with Mitigation, Section 4.16.1.6.1.**

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; **Less than Significant with Mitigation, Section 4.16.1.6.2.**

6.16.1.2 Wastewater

Would the project:

- Exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board; **Less than Significant, Section 4.16.2.5.1.**
- Result in a determination by the wastewater treatment provider, which services or may serve the project, that it lacks adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; **Less than Significant, Section 4.16.2.5.2.**
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. **Less than Significant, Section 4.16.2.5.2.**

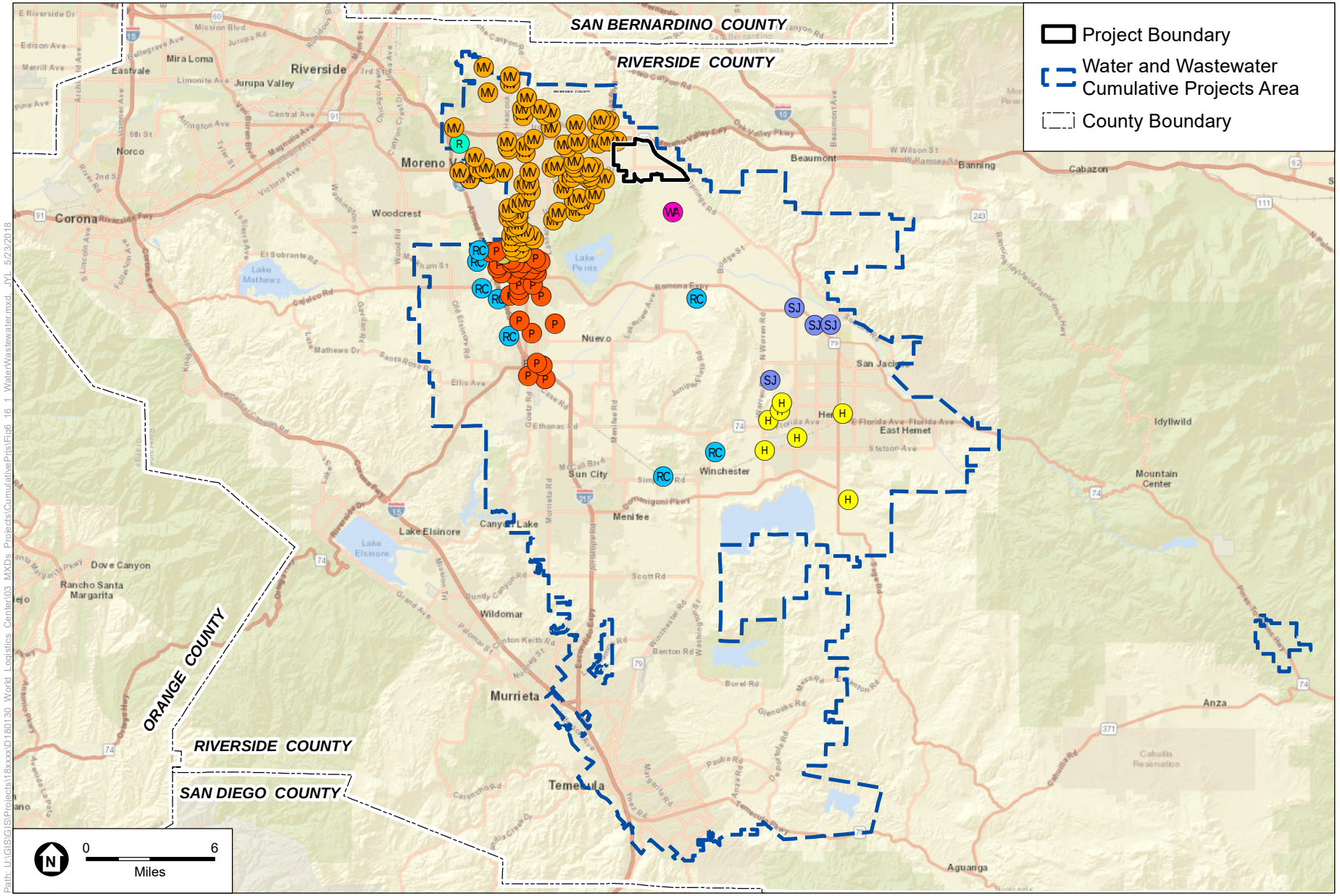
6.16.1.3 Solid Waste

Would the project:

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; **Less than Significant, Section 4.16.3.5.1.**
- Fail to comply with applicable Federal, State, and local statutes and regulations related to solid waste. **Less than Significant, Section 4.16.3.5.2.**

6.16.2 Geographic and Temporal Scope

The cumulative impact geographic area for utilities and service systems includes the Eastern Municipal Water District (EMWD) and Waste Management Services areas. The geographic area was selected to access the potential impacts to capacity within each service district. Cumulative impacts to utilities and service systems could result from impacts of the project in conjunction with the impacts of other past, present and future projects located within the EMWD and Waste Management service areas. The cumulative projects geographic boundary for Utilities and Service Systems is shown in Figure 6.16-1, Water and Wastewater and Figure 6.16-2B, Solid Waste. The projects located within the utilities and service systems cumulative impact area are listed in Table 6.16-1 and 6.16-2. The project would contribute to cumulative utilities and service system impacts starting with project construction and lasting for the duration of the project.



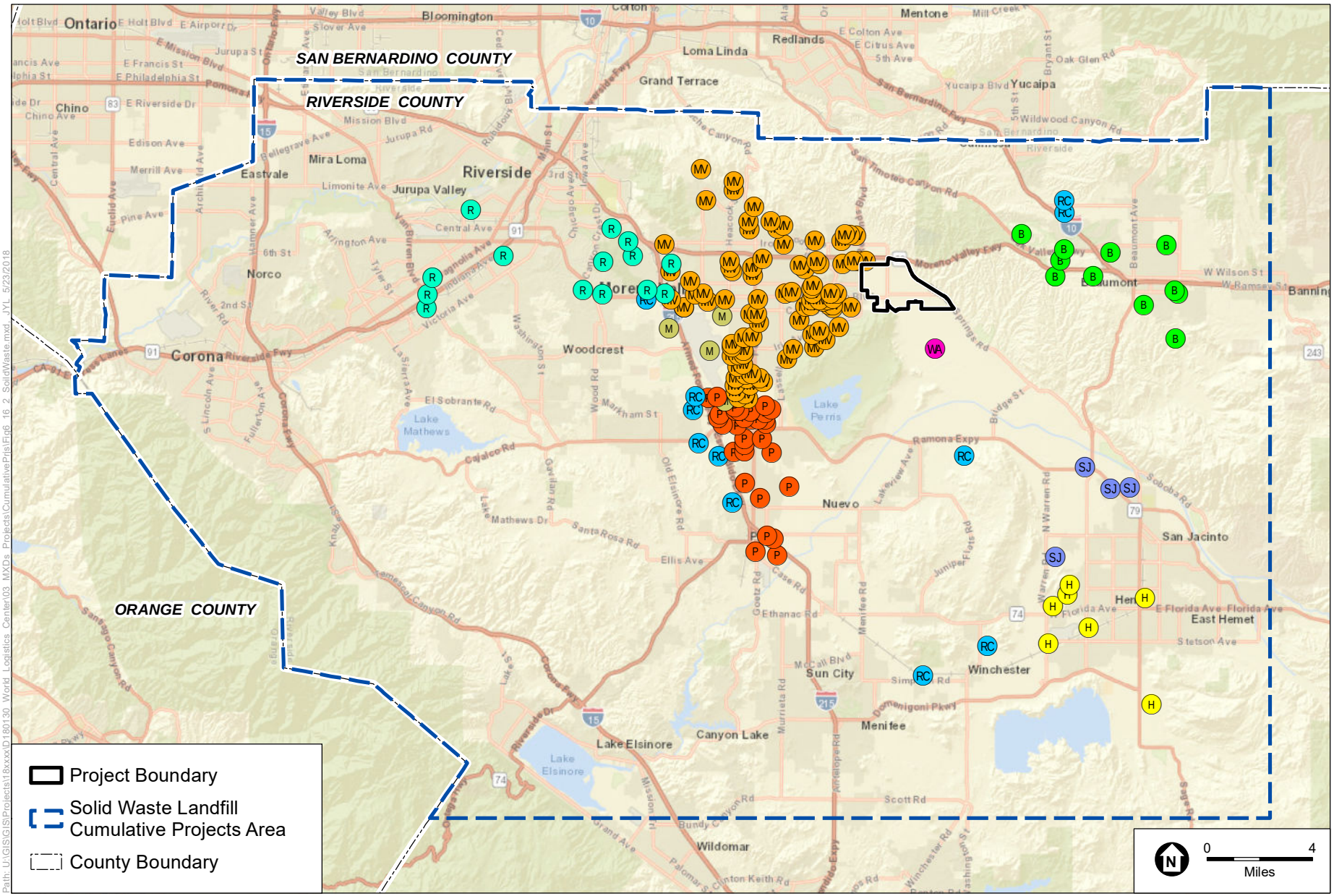
SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.16-1

Water and Wastewater Cumulative Projects Area

ESA



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

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Figure 6.16-2

Solid Waste Landfill Cumulative Projects Area

ESA

Table 6.16-1: Water and Wastewater Cumulative Projects Summary

Project ID	Project	Environmental Document Summary
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's 2008 EIR, the Tres Cerritos Specific Plan would result in the development of 787 residential units, park and open space, on 154.7 acres. The project requires water and wastewater service which could result in cumulative impacts.
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres. The project requires water and wastewater service which could result in cumulative impacts.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres. The project requires water and wastewater service which could result in cumulative impacts.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community. The project requires water and wastewater service which could result in cumulative impacts.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres. The project requires water and wastewater service which could result in cumulative impacts.
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space. The project requires water and wastewater service which could result in cumulative impacts.
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf. The project requires water and wastewater service which could result in cumulative impacts.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes. The project requires water and wastewater service which could result in cumulative impacts.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes. The project requires water and wastewater service which could result in cumulative impacts.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acres The project requires water and wastewater service which could result in cumulative impacts.
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-39	VIP Moreno Valley (Sares Regis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres.
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site. The project requires water and wastewater service which could result in cumulative impacts.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land. The project requires water and wastewater service which could result in cumulative impacts.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped. The project requires water and wastewater service which could result in cumulative impacts.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space. The project requires water and wastewater service which could result in cumulative impacts.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land. The project requires water and wastewater service which could result in cumulative impacts.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space. The project requires water and wastewater service which could result in cumulative impacts.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots.
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units. The project requires water and wastewater service which could result in cumulative impacts. The project requires water and wastewater service which could result in cumulative impacts. The project requires water and wastewater service which could result in cumulative impacts.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 sq new retail/commercial uses on the approximately 22.28-acre site. The project requires water and wastewater service which could result in cumulative impacts.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area. The project requires water and wastewater service which could result in cumulative impacts.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel. The project requires water and wastewater service which could result in cumulative impacts.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. The project requires water and wastewater service which could result in cumulative impacts.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone. The project requires water and wastewater service which could result in cumulative impacts.
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots. The project requires water and wastewater service which could result in cumulative impacts.
MV-88	TR33771 / Creative Design Associates	
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594. The project requires water and wastewater service which could result in cumulative impacts.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area. The project requires water and wastewater service which could result in cumulative impacts.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project. The project requires water and wastewater service which could result in cumulative impacts.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans. The project requires water and wastewater service which could result in cumulative impacts.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's 2006 ND, the project would subdivide a 46 gross acre site into 78 single-family residential lots within area adjacent to city limits. Applicant is proposing Pre-zoning and a GP Amendment to establish an R3 land use district and request the expansion of the Moreno Valley SOI and annex the project into the City. The project requires water and wastewater service which could result in cumulative impacts.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision. The project requires water and wastewater service which could result in cumulative impacts.
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site. The project requires water and wastewater service which could result in cumulative impacts.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses. The project requires water and wastewater service which could result in cumulative impacts.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes. The project requires water and wastewater service which could result in cumulative impacts.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres. The project requires water and wastewater service which could result in cumulative impacts.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes. The project requires water and wastewater service which could result in cumulative impacts.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes. The project requires water and wastewater service which could result in cumulative impacts.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses. The project requires water and wastewater service which could result in cumulative impacts.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf. The project requires water and wastewater service which could result in cumulative impacts.
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space. The project requires water and wastewater service which could result in cumulative impacts.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project. The project requires water and wastewater service which could result in cumulative impacts.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures. The project requires water and wastewater service which could result in cumulative impacts.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres. The project requires water and wastewater service which could result in cumulative impacts.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Fina EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street. The project requires water and wastewater service which could result in cumulative impacts.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre. The project requires water and wastewater service which could result in cumulative impacts.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf. The project requires water and wastewater service which could result in cumulative impacts.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site. The project requires water and wastewater service which could result in cumulative impacts.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site. The project requires water and wastewater service which could result in cumulative impacts.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units. The project requires water and wastewater service which could result in cumulative impacts.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres. The project requires water and wastewater service which could result in cumulative impacts.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres. The project requires water and wastewater service which could result in cumulative impacts.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility. The project requires water and wastewater service which could result in cumulative impacts.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres. The project requires water and wastewater service which could result in cumulative impacts.

Project ID	Project	Environmental Document Summary
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed. The project requires water and wastewater service which could result in cumulative impacts.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project. The project requires water and wastewater service which could result in cumulative impacts.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings. The project requires water and wastewater service which could result in cumulative impacts.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres.

Project ID	Project	Environmental Document Summary
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements. The project requires water and wastewater service which could result in cumulative impacts.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space. The project requires water and wastewater service which could result in cumulative impacts.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space. The project requires water and wastewater service which could result in cumulative impacts.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking. The project requires water and wastewater service which could result in cumulative impacts.

Table 6.16-2: Solid Waste Cumulative Projects Summary

Project ID	Project Name	Environmental Document Summary
B-3	Heartland	Per the City of Beaumont Planning Department's 1994 EIR, the Heartland Specific Plan would develop low and medium density housing, and supporting land uses on 417.2 acres.
B-4	Hidden Canyon	Per the City of Beaumont Planning Department's 2004 EIR, the Hidden Canyon EIR Addendum to the Beaumont Gateway Specific Plan would result in the development of 426 residential units, commercial space and open space on 196.5 acres
B-5	ProLogis/Rolling Hills Ranch Industrial	Per the City of Beaumont Planning Department's 2004 EIR, the Second Amendment to the Rolling Hills Ranch Specific Plan would change the 152,9 acre property's General Plan land use designation from low density residential to Business Park
B-7	Kirkwood Ranch (#14)	Per the City of Beaumont Planning Department's 1990 EIR, the Kirkwood Ranch Specific Plan would develop 470 single family detached units and 60 multi-family units on a 128 acre site.
B-9	Sundance (#17)	Per the City of Beaumont Planning Department's 2004 EIR, the Sundance Specific Plan Amendment to the Deutsch Specific Plan would result in the development of 1,968 single-family units, 2,208 homes, and 540 condo units, commercial space, and supporting land uses on 1,195 acres
B-10	Tract No. 32850 (#39)	Per the City of Beaumont Planning Department's 2005 ND, the Tract Map 32850 would divide a 29.09 acre parcel into 103 single-family residential lots.
B-11	San Gorgonio Village, Phase 2 (#45)	Per the City of Beaumont Planning Department's 2007 MND, the San Gregorio Village Specific Plan would provide for the development of approximately 225,000 square feet of commercial and restaurant uses on approximately 23 acres.
B-12	Beaumont Commercial Center	Per the City of Beaumont Planning Department's 2016 IS, the Beaumont Commercial Center would provide for the development of five commercial buildings with 58,603 square feet of retails, service, and restaurant uses.
B-14	Potrero Creek Estates (#26)	Per the City of Beaumont Planning Department's 1988 EIR, the Potrero Creek Estates Specific Plan would result in the residential development of 1,028 single family lots on 737 acres.
H-3	Tres Cerritos Specific Plan	Per the City of Hemet's 2008 EIR , the Tres Cerritos Specific Plan would result in the development of 787 residential units, park and open space, on 154.7 acres.

Project ID	Project Name	Environmental Document Summary
H-4	Sanderson Square	Per the City of Hemet's 2006 IS, the Sanderson Square Specific Plan would result in the development off commercial and industrial uses on approximately 45 acres.
H-5	McSweeny Farms Specific Plan	Per the City of Hemet's 2003 EIR, the McSweeny Farms Properties Specific Plan would result in the construction of 2,482 residential units within 442 acres.
H-6	Ramona Creek Specific Plan	Per the City of Hemet's 2014 EIR, the Ramona Creek Specific Plan and General Plan Amendment would result in the development of a multiple-use commercial and residential community.
H-7	Peppertree Specific Plan	Per the City of Hemet's 2003 ISMND, the Peppertree Specific Plan would result in the development of 456 residences, and recreational spaces of 79.2 acres
H-9	Pulte Del Web (TTM 31807 and 31808)	Per the City of Hemet's 2005 SEIR, the Tentative Tract Map 31807, Tentative Tract Map 31808, and Specific Plan Amendment SPA 04-1 would result in the amendment of a land use plan for a 10 acre site from commercial to high medium density residential and the division of 154.77 acres into 611 residential lots, an adult community center, and open space.
H-10	Downtown Hemet Specific Plan	Per the City of Hemet's 2017 ISMND, the proposed Downtown Hemet Specific Plan is a comprehensive plan that features a land use plan, circulation plan, urban design framework, utility infrastructure plan, development standards, design guidelines, and sustainability plan for future development within a 360-acre area in downtown Hemet.
M-2	Meridian Business Park Phases I and II	Per the March Joint Powers Authority's 2017 EIR , the project would result in the development of a 130 acre business park.
M-8	March LifeCare Campus Specific Plan	Per the March Joint Powers Authority's 2009 EIR, the project would result in the development of a medical campus on approximately 236 acres.
M-11	PA 06-0014 (Pierce Hardy Limited Partnership)	Per the March Joint Power's Authority's draft ND, the project would construct a Retail/Storage Lumber Yard Complex (approximately 67,800 square feet of total building space) on 11.0 acres.
MV-3	ProLogis	Per the City of Moreno Valley's September 2014 EIR, this project would develop approximately 2,244,638 square feet of distribution warehouse uses on approximately 122.8-acres.
MV-4	Westridge Commerce Center	Per the City of Moreno Valley's April 2011 Final EIR, the project would develop approximately 937,260 square feet of light industrial warehouse/ distribution uses and related infrastructure on 55 acres.

Project ID	Project Name	Environmental Document Summary
MV-7	TR33962 / Pacific Scene Homes	Per the City of Moreno Valley's 2006 ND, the project would subdivide 20 acres into 31 single-family residential lots ranging in size from 20,001 sf to 27,562 sf.
MV-8	TR32460 / Sussex Capital	Per the City of Moreno Valley's 2006 ND, the project proposes 57 single family residential lots and 2 detention basins on 36.7 acres.
MV-10	TR30998 / Pacific Communities	Per the City of Moreno Valley, the project would subdivide 60 acres into 47 single family lots.
MV-11	TR30411 / Pacific Communities	Per the City of Moreno Valley's 2002 Negative Declaration, this project would result in 25 single family homes on 30.02 acres.
MV-14	TR32548 / Gabel, Cook & Associates	Per the City of Moreno Valley's November 2005 Negative Declaration, this project would subdivide 36.24 acres for residential purposes.
MV-15	TR32218 / Whitney	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 17.25 acres for 63 single-family homes and open space.
MV-16	TR32284 / 26thCorporation & Granite Capitol	Per the City of Moreno Valley's October 2004 Negative Declaration, this project would result in the development of 32 residential lots on 8.77 acres.
MV-17	TR31590 / Winchester Associates	Per the City of Moreno Valley's May 2005 Negative Declaration, this project would subdivide 30acres for 96 single family homes.
MV-18	Convenience Store / Fueling Station	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a gas station (including a 4,000 square foot convenience store and an automated drive through car wash) on 4.17 acres.
MV-19	Senior Assisted Living	Per the City of Moreno Valley's environmental checklist/initial study, this project would develop a 98,434 square foot, 139 unit (155 bed) senior assisted living facility on 7.33 acres.
MV-20	Moreno Marketplace	Per the City of Moreno Valley's June 2006 Negative Declaration, this project would develop a 95,905 square foot retail center on 10.46 acres.
MV-21	PEN16-0053 Medical Center	Per the City of Moreno Valley's November 2017 MND, this project would develop a medical complex on 18.38 acres.
MV-22	TR36882 (PA15-0010) SFR	Per the City of Moreno Valley's June 2015 MND, this project would subdivide 9.4 acres for 40 residential lots.
MV-24	TM 36436 (PA12-0005)	Per the City of Moreno Valley's December 2012 MND, this project would subdivide 43.52 acres for 159 single family residential lots.
MV-25	TR32142	Per the City of Moreno Valley's June 2004 Negative Declaration, this project would result in the development of 172 multi-family residences on 19.3 acres.

Project ID	Project Name	Environmental Document Summary
MV-27	TR32917 / Empire land	Per the City of Moreno Valley's March 2005 Negative Declaration, this project would result in the development of a 227-unit condominium project on 17.9 acres.
MV-28	TR34329 / Granite Capitol	Per the City of Moreno Valley's June 2007 initial study/environmental checklist form, this project would result in the development of 90 condominium units on 10.41 acre
MV-29	TR36340	Per the City of Moreno Valley's April 2005 Negative Declaration, this project would develop a 276-unit condominium complex on 32 acres.
MV-30	PA03-0168 TR 31517	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 31.71 acres for the development of 83 single-family residential lots.
MV-32	TTM 31592 (P13-078) SFR	Per the City of Moreno Valley's March 2014 Negative Declaration/Addendum, the project revises downward the level of previously-approved development. As a result, 115 single-family homes would be built on 64.65 acres within an overall project site of 203.52 acres.
MV-33	TR32645 / Winchester Associates	Per the City of Moreno Valley's December 2004 Negative Declaration, the project would subdivide 20 acres for 53 single-family residential lots.
MV-34	TR34397 / Winchester Associates	Per the City of Moreno Valley's April 2007 initial study/environmental checklist form, the project would subdivide 19 acres for 50 single-family residential lots.
MV-35	TR31771 / Sanchez	Per the City of Moreno Valley's April 2006 Negative Declaration, the project would subdivide 9.34 acres for 25 single-family residential lots and two water quality basins.
MV-36	TM 31618 (PA03-0106)	Per the City of Moreno Valley's November 2004 Negative Declaration, the project would subdivide 18.99 acres for 56 single-family residential lots.
MV-37	Vogel /PA09-004	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres.
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	Per the City of Moreno Valley's June 2012 EIR, the project would develop approximately 1,616,133 square feet of distribution warehouse uses (including business office space and parking) on approximately 71 acres.
MV-41	First Nandina Logistics Center	Based on the City of Moreno Valley's October 2014 Facts, Findings, and Statement of Overriding Considerations, the project would develop approximately1,371,210 square feet of warehouse uses; 12,000 square feet of office space; and 66,790 square feet of mezzanine space on 72.9 acres.

Project ID	Project Name	Environmental Document Summary
MV-42	Indian Street Commerce Center	Per the City of Moreno Valley's 2016 FEIR, the project would prepare the Indian Street Commerce Center Project which proposes approximately 446,350 square feet of light industrial uses within an approximately 19.64-acre site.
MV-43	Ivan Devries / PA06-0017	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare the IS for a project that will build distribution warehouse buildings totaling approximately 569,200 sf on 28.64 acres of land.
MV-44	Modular Logistics Center (Kearny RE Co)	Per the City of Moreno Valley's 2017 FEIR, the project would prepare an EIR that would redevelop 50.84 acres with one logistic warehouse building containing 1,109,378 sf of building space with 256 loading bays.
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	Per the City of Moreno Valley's Environmental Checklist, the project would prepare an EIR to subdivide 75.05-acre property into four parcels with business center land uses.
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare an IS for one 1,560,046 sf warehouse building on a project site that is currently vacant and undeveloped.
MV-50	San Michele Industrial Center, (Industrial Area SP)	Per the City of Moreno Valley's 2005 ND, the project would prepare an ND for a 414,533 sf warehouse distribution facility on 17.17-net acre site.
MV-51	Nandina Distribution Center IDS	Per the City of Moreno Valley's 2007 IS and Environmental Checklist, the project would prepare an MND to construct a 770,867 square foot industrial building located on the southeast corner of Heacock Street and San Michele Road on approximately 38 acres.
MV-52	First Industrial III & IV, (Industrial Area SP)	Per the City of Moreno Valley's 2008 IS and Environmental Checklist, the project would prepare an MND for a project that consists of two industrial buildings with a total of approximately 880,000 square feet of warehouse space.
MV-53	I-215 Logistics Center (Amazon)	Per the City of Moreno Valley's IS and Environmental Checklist, the project would prepare a MND for the construction of two (2) distribution warehouse buildings totaling 1,705,000 sf on approximately 76 acres of land.
MV-54	Moreno Valley Logistics Center (Prologis)	Per the City of Moreno Valley's 2017 MMP, the project would prepare MMP for the construction and operation of a logistics center with four (4) buildings and a combined 1,736,180 square feet (sf) of total floor space.
MV-57	Tract Map 34151	Per the City of Moreno Valley's 2006 General Plan Resolution, the project would subdivide 8.95 acres into 37 single-family lots.

Project ID	Project Name	Environmental Document Summary
MV-58	Tract Map 33024	Per the City of Moreno Valley's 2005 General Plan Resolution, the project would subdivide 2.17-net acres into 8 single-family lots.
MV-59	Tract Map 31442	Per the City of Moreno Valley's 2004 MND, the project would subdivide the 15.8-net acres into 63 single-family residential lots.
MV-60	Tract Map 36401	Per the City of Moreno Valley's 2012 ND, the project would subdivide 19.4 acre project site and 9 common areas lot to build three types of residential product for a total of 216 dwelling units.
MV-61	Walmart & Gas Station	Per the City of Moreno Valley's 2015 FEIR, the project would develop approximately 193,000 square feet of new retail/commercial uses on the approximately 22.28-acre site.
MV-63	PA14-0053 (TTM 36760) Legacy Park	Per the City of Moreno Valley's 2017 MND, the project would subdivide the 53 acre site into a total of 221 single family residential lots.
MV-65	TR33607 / TL Group	Per the City of Moreno Valley's 2006 ND, the project would complete a 52-unti condominium on 4.28 acres.
MV-66	TR34988 / Stratus Properties	Per the City of Moreno Valley's 2007 ND, the project would propose 271 units on 3.75 acres of outdoor recreation area.
MV-67	TR32515	Per the City of Moreno Valley's 2005 ND, the project would develop 174 senior single-family residential lots and retain natural open space on a 38.4 acre parcel.
MV-68	PA07-0035	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel.
MV-69	PA07-0039, (Industrial Area SP)	Per the City of Moreno Valley's 2009 ND, the project would develop six industrial buildings on 19.14 acre parcel.
MV-75	Aqua Bella Specific Plan	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres.
MV-78	Overton Moore Properties PA08-0072	Per the City of Moreno Valley's 2005 EIR, the project would develop a gated active-adult community containing 2,922 dwelling units on 685 acres.
MV-79	Shaw Development	Per the City of Moreno Valley's 2014 IS and Environmental Checklist, the project proposes construction and operation of an approximate 366,698 square-foot warehouse on approximately 16.07 acres.
MV-80	PA15-0032 MV Cactus Center	Per the City of Moreno Valley's 2017 IS and environmental checklist, the project proposes to develop a 39,950 sf warehouse building, gas station, car wash, and 3 fast-food restaurant on 6.3 acres.
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	Per the City of Moreno Valley's 2010 IS and environmental checklist, the project proposed to build a 353,859 sf warehouse distribution building on 16.55 acres in a light industrial zone.

Project ID	Project Name	Environmental Document Summary
MV-84	PA16-0075 Brodiaea Business Center	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres.
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	Per the City of Moreno Valley's 2017 IS, the project would develop 8 industrial buildings and 1 future industrial building on 126 acres.
MV-86	TR32505 / DR Horton	Per the City of Moreno Valley's 2007 ND, the project would subdivide 18.66 acres into 72 single-family residential lots.
MV-91	TR31305 / Richmond American	Per the City of Moreno Valley's 2004 ND, the project would subdivide 22.9-net acres in the R5 zone into 87 single-family residential lots. A portion of the subject site was previously subdivided as part of Tract Map No. 27251.
MV-92	TR 33256	Per the City of Moreno Valley's 2005 ND, the project would subdivide 28.6-net acres in the R5 zone into 99 single-family residential lots. The site backs to SR 60. The Tract's northern boundary will change because of the expansion of Caltrans ROW to complete improvements to the eastbound off-ramp. A portion of the site includes approved Tentative Tract Map No. 28594.
MV-93	PA14-0042 Edgemont Apartments	Per the County of Riverside's 2001 Final SP/EIR would result in the development of the Oak Valley & SCPGA Gold Course Area.
MV-94	PA15-0002 Box Springs Apartments	Per the City of Moreno Valley's 2015 Addendum to MND SCH No. 2007101131, the project site will consist of the same approx. 12 acres for the proposed 266-unit multi-family residential development which is an increase of 26 units and a modification to the building designs and locations. Mitigation Measures and Conditions Approval from the original project will be included in the modified project.
MV-95	Moreno Beach Marketplace / Lowes	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans.
MV-96	31394 Pigeon Pass, Ltd.	Per the City of Moreno Valley's IS/Checklist, the project proposes to develop 14.2 acres with approximately 11.58 acres remaining vacant. Project includes a total of four applications, GP Amendment, Zone Change, and 2 Master Plot Plans.
MV-97	32005 Red Hill Village, LLC	Per the City of Moreno Valley's 2005 ND, project includes a tentative tract map to develop a Planned Unit Development consisting of approximately 214 clustered and single-family residential gated community.
MV-98	33388 SCH Development, LLC	Per the City of Moreno Valley's 2007 ND, project proposes to subdivide a 19.5 gross acre parcel into a 16 lot single-family residential subdivision.

Project ID	Project Name	Environmental Document Summary
MV-100	32215 Winchester Associates "Scottish Village"	Per City of Moreno Valley's 2006 IS/Environmental Checklist Form, project proposes a planned residential development of 194 residential units on a 26.12-acre site.
MV-103	Gateway Business Park	Per the City of Moreno Valley's 2008 IS and environmental checklist, the project would develop a business park consisting of 16 buildings with office, industrial, and warehouse space and associated parking areas on 25.3 acres.
MV-106	35304 Jimmy Lee	Per the City of Moreno Valley's 2007 Resolution, the project would develop 12 condominiums with 15 dwelling units on 0.9 acres.
MV-110	TM 33417	Per the City of Moreno Valley's Environmental Checklist, the project would propose a 60 unit condominium complex on 7.40 acres.
MV-111	35769 Michael Chen	Per City of Moreno Valley Planning Commission Resolution 2009-21, this tentative tract map is for a 16-unit condominium complex on 1.21 acres.
MV-112	PA09-0006 Jim Nydam	Per City of Moreno Valley Planning Commission Resolution 2009-25, this project would result in the development of a 15-unit affordable housing project on 1.57 acres.
MV-113	Ironwood Residential	Per the City of Moreno Valley's November 2016 MND, this project would develop 101 single family home subdivision on approximately 75 acres, including open space, a park, trails, streets, utility improvements, and related infrastructure.
MV-114	Stoneridge Town Centre - Vacant Restaurant	Per the City of Moreno Valley's March 2006 Negative Declaration, this project would subdivide a 55.45 acre parcel into 25 individual parcels to be developed as 563,328 square feet of commercial uses.
MV-116	31621 Peter Sanchez	Per the City of Moreno Valley's Checklist form, this project would subdivide 3.1 acres to be developed as 12 single family homes.
MV-117	Riverside County Office Building	Per the City of Moreno Valley's September 2014 Negative Declaration, this project would develop a 52,250 square foot office building and 342 parking spaces on 5.8 acres.
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	Per the City of Moreno Valley's December 2003 checklist form, this project would subdivide 46.16 acres for nine single family homes.
MV-119	32126 Salvador Torres	Per the City of Moreno Valley's November 2007 Negative Declaration, this project would subdivide 9 acres for 35 single family homes.
P-2	TR34716	Per the City of Perris' 2013 FEIR, the project involves the construction and operation of up to 600,000 gross square feet (gsf) of light industrial/warehouse uses.
P-4	Bookend	Per the City of Perris' 2015 MND, the project proposed to subdivide an existing vacant parcel into five new industrial parcels with a total building area of 165,000 sf.

Project ID	Project Name	Environmental Document Summary
P-5	Markham East	Per the City of Perris's June 2007 Notice of Determination, the project would develop 462,692 square feet of light industrial warehouse/distribution uses in a single building with associated roadway and utility infrastructure and landscape improvements on 22.25 acres.
P-7	Duke Warehouse	Per the City of Perris's Facts, Findings and Statement of Overriding Considerations, the project would redesign ate a large portion of the northern part of the City with broad categories of compatible commercial and industrial uses on 34.57 acres. Uses would include a 668,681 square foot industrial/warehouse building that includes 19,200 square feet of office space.
P-8	First Perry Logistics Project	Per the City of Perris's November 2017 Notice of Determination, the project would develop a 236,961 square foot industrial building on 11.06 acres.
P-10	IDS	Per City of Perris 2005 Final EIR would result in the Perris Warehouse/Distribution Facility Project.
P-11	Ridge II	Per the City of Perris 2007 NOC and Environmental Doc Transmittal, project proposes a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures.
P-14	Rados Distribution Center	Per the City of Perris 2010 Final EIR, project is an approximately 1,191,080 sq ft distribution center on approximately 61.63 gross acres.
P-15	Duke Perris Logistics Center I	Per the City of Perris 2017 Fina EIR, the project would result in the Duke Warehouse at Indian Avenue and Markham Street.
P-16	Perris Ridge Commerce Center I	Per the City of Perris' 2007 EIR, the project proposes the establishment of a new industrial warehouse use, incorporating approximately 2 million square feet of building area in two structures on 91 acres.
P-18	P07-07-0029	Per the City of Perris' 2009 EIR, the project proposed to construct a 1,608,322 sf industrial complex comprised of five buildings on 92.3 acres.
P-19	P05-0192	Per the City of Perris' 2006 EIR, the project proposed development of an approximately 700,000 square foot industrial building on a 40-acre.
P-20	P05-0113	Per the City of Perris' 2009 EIR, the project proposed subdividing the site into five legal parcels, four of which would be developed with industrial/warehouse buildings for a total of 1,750,000 sf.
P-21	P07-09-0018	Per the City of Perris' 2008 IS, the project proposed the development of a 173,000 sf industrial building on 8.7 acres.

Project ID	Project Name	Environmental Document Summary
P-22	NICOL	Per the City of Perris' 2016 IS/MND, the project proposed a 380,000 sf warehouse building on 21.63 acres.
P-23	Westcoast Textiles	Per the City of Perris' 2016 IS, the project proposed construction of a 187,850 sf industrial/manufacturing building on 9 acres.
P-24	Optimus Logistics Center 1	Per the City of Perris' 2016 EIR, the project proposed to construct a high-cube warehouse consisting of two buildings totaling 1,455,781 sf on 68.99 acres.
P-25	Optimus Logistics Center 2	Per the City of Perris' 2015 EIR, the project proposed construction of warehouse development site encompassing 1,037,811 square feet in two buildings on 48.4 acres.
P-26	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 811,620 square feet (sf) of industrial high-cube, non-refrigerated warehouse/distribution uses on the approximate 37.3-acre site.
P-27	Perris DC (Industrial Property Trust)/Integra	Per the City of Perris' 2014 EIR, the project proposed construction and operation of up to 864,000 square feet (sf) of industrial warehouse/distribution uses on the approximate 43.2-acre site.
P-28	Duke Warehouse	Per the City of Perris' 2017 IS, the project proposed construction and operation of approximately 1,189,860 square feet (sf) of high-cube warehouse/distribution uses on the approximate 55-acre Project site.
P-30	Avelina	Per the City of Perris' 2003 IS, the project proposed to increase residential density on a 158.2 acre property to 475 dwelling units.
P-31	Perris Family Apartments	Per the City of Perris' 2013 IS, the project proposed to construct a 75-unit multi-family apartment complex on 7 vacant acres.
P-32	Lewis Retail Center	Per the City of Perris' 2009 IS, the project proposed to construct 643,000 sf of commercial shopping center on 68 acres.
P-35	Verano Apartments	Per the City of Perris' 2013 IS, the project proposed increasing the number of residential units from 19 to 40 and reducing the commercial component from 17,000 sq. ft. to 1,000 sq. ft. for retail and to allow a 2,000 sq. ft. day care facility.
P-58	Jordan Distribution	Per the City of Perris's June 2008 Notice of Determination, the project would develop a 378,521 square foot tilt-up industrial building for warehouse distribution uses on 17.1 acres.
R-1	Sycamore Canyon Business Park - Bldgs 1&2	Per the City of Riverside's January 2017 Final EIR, the project would develop approximately 1.43 million square feet of business park uses on approximately 920 acres.
R-2	Alessandro Business Center (Western Realco)	Per the City of Riverside's February 2015 Addendum to the Final EIR, the project would develop 662,018 square feet of industrial warehouse uses on 36.7 acres.

Project ID	Project Name	Environmental Document Summary
R-4	Quail Run	Per the City of Riverside's January 2016 Initial Study, the project would develop a 13-building apartment complex on approximately 16 acres of a 30.9 acre site that also would include parking structures and spaces, and open space.
R-5	Canyon Springs Healthcare Campus Specific Plan	Per the City of Riverside's July 2017 Draft EIR, the project would develop a healthcare campus on 50.85 acres, including an approximately 234-unit senior housing facility; approximately 310,200-square-foot (267-unit, 290-bed) independent living/memory care, assisted living, and skilled nursing facility; an approximately 324,000-square-foot (180-bed) hospital; approximately 22,000 square-foot central energy plant; approximately 70,000-square-foot medical office building; an additional 300,000-square feet of medical office building uses with retail; multiple multi-level parking structures; and an approximately 180,000-square-foot (100-bed) hospital addition. A helipad/helistop also is proposed.
RC-5	Villages of Lakeview -Residential/Commercial Development	Per Riverside County's August 2016 Draft EIR, the Villages of Lakeview project proposes a master-planned community comprised of approximately 2,800 acres in the Lakeview/Nuevo area of Riverside County. Proposed land uses within the Specific Plan include a wide range of residential products, mixed-uses, retail, schools with joint-use parks, public and private amenities, an array of parks, trails, open space, roads, and other infrastructure. Existing infrastructure such as water, sewer, storm drain, and roadways will also be expanded as part of the Villages of Lakeview project.
RC-9	Oleander Business Park, PP20699	Per what appear to be public meeting slides presenting information about Riverside County's May 2008 Final EIR for this project, the project would subdivide approximately 68.8 acres to develop approximately 1,206,710 square feet of industrial buildings.
RC-10	Majestic Freeway Business Center, SP 341 / PP21552	Per Riverside County's December 2006 Initial Study, the project would develop 947,000 square feet of light industrial warehouse and distribution uses and a 1.62 acre detention basin on 47.25 acres.
RC-11	Alessandro Commerce Center	Per Riverside County's April 2009 screencheck draft EIR, the project would develop 409,000 square feet of warehouse, 42,000 square feet of light industrial, 10,000 square feet of retail/restaurant, and 258,000 square feet of office uses, associated parking, and three detention basins on 54.4 acres.

Project ID	Project Name	Environmental Document Summary
RC-13	Sunny-Cal Specific Plan (#40)	Per the City of Beaumont's June 2007 Response to Late Comments on the EIR, the project would develop a 907-unit housing project on up to 323.3 acres.
RC-34	Emerald Acres SP (SP00381)	Per Riverside County's January 2016 Initial Study, the project would develop the approximately 332.6-acre site as a residential community consisting of a maximum of 355 single family dwelling units on 76.3 acres; 179 multi-family dwelling units on 16.7 acres; 4.88 acres of commercial uses; a community park on 6.8 acres; 209.7 acres of open space; a 0.9-acre sewer lift station; and roadway improvements.
RC-35	TR34677, TR31100, TR32391, TR33448, TR31101, TR31009, TR32282	Per Riverside County's February 2004 environmental assessment form/initial study, the project would subdivide 6.7 acres of a 71 acre parcel into 8 single-family residential lots, a detention basin, and 2.2 acres of open space.
RC-38	San Gorgonio Crossings	Per Riverside County's May 2017 Recirculated Draft EIR, the project would develop two house high-cube warehouse buildings on an approximately 229 acre site, of which approximately 16 acres are located within the City of Calimesa. Approximately 140.23 acres of the site would be included within the developed portion of the project; 84.8 acres would remain natural open space.
SJWA-1	San Jacinto Wildlife Land Management Plan	Per the California Department of Fish and Wildlife's 2017 Draft PEIR, the project involves the proposed Land Management Plan (LMP) for the approximately 20,126 acre San Jacinto Wildlife Area. Public uses that would continue to be permitted under the draft LMP include waterfowl and upland small game hunting, bird watching, hiking, hunting dog training, fishing, horseback riding, nature study, photography, and mountain biking.

6.16.3 Cumulative Impact Evaluation

6.16.3.1 Water Supply

6.16.3.1.1 Construction of Expansion of Water Treatment Facilities

Impact: *The project's incremental contribution to environmental effects associated with the construction of new water treatment facilities or expansion of existing facilities would not cause or contribute to a significant cumulative effect.*

Threshold:	Would the proposed WLC project require the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

Cumulative Impact Analysis

The cumulative impact geographic area for water treatment facilities is the EMWD. Cumulative impacts to water treatment facilities could result from the project in conjunction with other past, present and future projects located within the EMWD resulting in impacts due to construction of water treatment facilities. Water treatment services for the City, including the project site and cumulative project sites, is provided by the EMWD.

According to FEIR Section 4.16, the project would require the construction of new water reservoirs to serve each of three water pressure zones (1967, 1860, and 1764). All three reservoir sites are located outside of the Specific Plan boundary. As development proceeds within the project area, new waterlines, ranging in size from 12 to 24 inches, will be constructed in the existing and future street rights-of-way to connect the future water tanks to the development area. The water system will require a new pump station at the 1764 reservoir and an upgrade to the existing EMWD pump station near Cottonwood Avenue and Redlands Boulevard. All water facilities for the project would be constructed to EMWD standards and would be subject to a Plan of Service approval by EMWD (Specific Plan Section 3.5.1). Potential significant environmental impacts associated with such construction include air quality, traffic, biological resources, cultural resources, noise, hydrology, water quality, and other impacts as identified and analyzed in Chapters 4.0, 5.0 and 6.0 of this FEIR. None of those sections identified construction or operation of the project's new or expanded water facilities as resulting in significant impacts apart from those already analyzed in this FEIR.

Annually, a 5-year Capital Improvement Plan (CIP) is prepared by the EMWD. The EMWD's CIP outlines specific projects and their funding sources. Each project is also submitted individually to the Board for authorization and approval. This allows the EMWD to match needed facilities with development trends accurately. Funding for the EMWD's microfiltration plants, distribution pipes, and the recharge and recovery program is listed in the most recent EMWD CIP. Development and construction of the cumulative scenario would be included in the most recent EMWD CIP. Each applicant also would have to fund the costs of the water-related infrastructure needed to serve a particular site. All new facilities proposed or necessitated by projects in the cumulative scenario would be subject to applicable CEQA review, and would be required to comply with all applicable laws and regulations protecting environmental resources. Cumulative project CEQA documents within the district boundary have been reviewed and the findings have been incorporated into this analysis.

Based on the above considerations, the impacts of the project would not combine with other projects in the cumulative scenario to cause or contribute to a significant cumulative impact. to water treatment facilities.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.2 Adequate Water Supply

Impact: *The project's incremental contribution to cumulative demand on water supplies requiring the need for new or expanded entitlements would not cause or contribute to a significant cumulative effect.*

Threshold:	Would the proposed WLC project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Cumulative Impact Analysis

The cumulative impact geographic area for water supply is the EMWD. The project would involve an increase in demand for water supplies. Cumulative projects also could result in potential water supply impacts, and incrementally increase the long-term demand for water service.

The WSA prepared for the project by the EMWD concluded that the water demand for the proposed on-site uses would be approximately 1,991.25 AFY.[1] The EMWD considers this a "worst-case" estimate based on the total acres and amount of square footage of warehousing proposed by the project. Taking into account the proposed water xeriscape landscaping plan, it is likely that actual water use for development within the WLC Specific Plan would be substantially less than the worst-case EMWD estimate. As identified in Table 4.16.A of the FEIR, anticipated water supplies in the EMWD total 213,900 and 302,200 AFY in 2015 and 2035, respectively. The water demand required for the proposed project would total 0.93 and 0.66 percent of the EMWD's 2015 and 2035 supplies under worst-case conditions. The demand estimated for this project is substantially less and therefore still within the limit of growth projected in the 2015 UWMP.

Existing and future development within the EMWD's service area would demand additional quantities of water. The project, along with any projects in the cumulative scenario, would be required to provide availability and commitment letters demonstrating sufficient water resources and access to available water facilities prior to building permit issuance. The 2015 UWMP addresses the water supply sources, projected demand, and supply reliability for Eastern EMWD service area. The 2015 UWMP estimates population within the EMWD service area to increase to 1,111,729 persons by the year 2035. Increases in population, square footage, and intensity of uses would contribute to increases in the overall regional water demand. The anticipated conversion of water-intensive uses (e.g., agriculture) and the implementation of existing water conservation measures and recycling programs would reduce the need for increased water supply. Demand projections for EMWD were developed using information about planned development and land use (UWMP 2015) and would include the water demand for the cumulative projects listed in Table 6.16-1. CEQA documents for projects in the cumulative scenario have been reviewed and the findings have been incorporated into the cumulative impact analysis.

Based on the information provided in the 2015 UWMP, EMWD has the ability to meet current and projected water demand through 2040 during normal, historic single-dry and historic multiple-dry year periods using imported water from MWD with existing supply resources. Planned local supplies will supplement imported supplies and improve reliability for EMWD and the region. In addition, adherence to regulations would ensure that cumulative projects would not result in a demand for water that exceeds existing entitlements and resources, or any new or expanded water-related infrastructure would be funded by the respective applicant. Therefore, projects in the cumulative scenario, together with the project, would not cause significant cumulative impacts associated with adequate water service and supplies.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures are required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.3 Storm Water Drainage Requirements

Impact: *The project's incremental contribution to environmental effects from the construction of new storm water drainage facilities or expansion of existing facilities would not cause or contribute to a significant cumulative effect.*

[1] *Water Supply Assessment Report for the World Logistics Center Specific Plan in Moreno Valley,* Eastern Municipal Water District, March 21, 2012.

Threshold:	Would the proposed WLC project result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Cumulative Impact Analysis

The cumulative impact geographic area for storm water drainage facilities is the watershed the project site is located in. The Final EIR, Section 4.16 analyzes the storm water drainage facilities necessary to serve the project site. To reduce flows to below or equal to pre-development conditions, the on-site storm water flows would be routed to a series of on-site detention and infiltration basins[2] by phase before flows are routed off site. While the increase in impervious surfaces attributable to the proposed WLC project would contribute to a greater volume and higher velocity of storm water flows, the proposed WLC project's detention and infiltration basins would accept and accommodate runoff that would result from project construction at pre-project conditions.

Potential significant environmental impacts associated with such construction include air quality, traffic, biological resources, cultural resources, noise, hydrology, water quality, and other impacts as identified and analyzed in Chapters 4.0, 5.0 and 6.0 of this FEIR. None of those sections identified construction or operation of the project's new storm water drainage facilities as resulting in significant impacts apart from those already analyzed in this FEIR. All new storm water drainage facilities proposed or necessitated by cumulative projects would be subject to applicable CEQA review, and would be required to comply with all applicable laws and regulations protecting environmental resources. CEQA documents prepared for projects in the cumulative scenario have been reviewed and the findings have been incorporated into this analysis.

Based on the above considerations, the impacts of the project would not combine with the impacts of other projects in the cumulative scenario to cause or contribute to significant cumulative impacts resulting from construction of storm water drainage facilities. As such, cumulative impacts to storm water drainage facilities would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.4 Wastewater Services

6.16.3.5 Wastewater Treatment Requirements

Impact: *The project's incremental contribution would not cause or contribute to any significant cumulative impact resulting from exceedance of wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board.*

Threshold:	Would the proposed WLC project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Cumulative Impact Analysis

The cumulative area for wastewater-related issues is the MVRWRF service area. Cumulative population increases and development within the area serviced by the MVRWRF would increase the

[2] A detention basin is an area where excess storm water is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.

overall regional demand for wastewater treatment service. The previous treatment capacity at the MVRWRF was 16 mgd. Improvements to this facility have increased capacity at this facility to 21 mgd. Ultimate expansion of this facility is expected to be 41 mgd. The MVRWRF is expected to have adequate capacity to service the City's wastewater needs through 2030. Any proposed changes to capacity of the MVRWRF or any facility maintained by EMWD are reviewed throughout the year. EMWD has a funding and construction mechanism in place that ensures improvements to EMWD facilities occurs in a timely manner. This funding mechanism is referred to as EMWD's Sewer Financial Participation Charge Program. For all new development within the EMWD service area, the Sewer Financial Participation Charge is allocated to assist in the financing of any future collection and disposal facilities and any future sewer treatment plant facilities. Cumulative development would not exceed the capacity of the wastewater treatment system because the MVRWRF would expand as growth occurred. CEQA documents for other projects in the cumulative scenario have been reviewed and the findings have been incorporated into this analysis.

The proposed project would not require the expansion of existing wastewater infrastructure: only connections to existing infrastructure would be required by the project. By adhering to the wastewater treatment requirements established by the Santa Ana RWQCB through the NPDES permit, wastewater from the project site that is processed through the MVRWRF would meet established standards. As the wastewater from all development within the service area of the MVRWRF would be similarly treated under the NPDES, no cumulatively significant exceedance of wastewater treatment requirements would occur.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.6 Wastewater Treatment Capacity and/or New or Expanded Wastewater Treatment Facilities

Impact: *The project's incremental contribution to impacts on wastewater treatment capacity would not cause or contribute to a significant cumulative effect.*

The project's contribution to environmental effects from the construction of new wastewater treatment facilities or expansion of existing facilities would be less than cumulatively considerable.

Threshold:	Would the proposed WLC project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it lacks adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? Would the proposed WLC project require the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Cumulative Impact Analysis

The cumulative area for wastewater-related issues is the MVRWRF service area. Cumulative population increases and development within the area serviced by the MVRWRF would increase the overall regional demand for wastewater treatment service. The previous treatment capacity at the MVRWRF was 16 mgd. Improvements to this facility have increased capacity at this facility to 21 mgd. Ultimate expansion of this facility is expected to be 41 mgd. The MVRWRF is expected to have adequate capacity to service the City's wastewater needs through 2030. Any proposed changes to capacity of the MVRWRF or any facility maintained by EMWD are reviewed throughout the year. EMWD has a funding and construction mechanism in place that ensures improvements to EMWD facilities

occurs in a timely manner. This funding mechanism is referred to as EMWD's Sewer Financial Participation Charge Program. For all new development within the EMWD service area, the Sewer Financial Participation Charge is allocated to assist in the financing of any future collection and disposal facilities and any future sewer treatment plant facilities. Cumulative development would not exceed the capacity of the wastewater treatment system because the MVRWRF would expand as growth occurred.

The proposed project would not cause or contribute to a cumulatively significant impact on wastewater infrastructure because the proposed project would not combine with the demands of other projects in the cumulative scenario to require the expansion of existing infrastructure. The project would require only connections to existing infrastructure. Potential significant environmental impacts associated with such construction include air quality, traffic, biological resources, cultural resources, noise, hydrology, water quality, and other impacts as identified and analyzed in Chapters 4.0 and 6.0 of this FEIR. None of those sections identified construction or operation of the project's new or expanded wastewater infrastructure as resulting in significant impacts apart from those already analyzed in this FEIR. CEQA documents for other projects in the cumulative scenario have been reviewed and the findings have been considered in this analysis.

By adhering to the wastewater treatment requirements established by the Santa Ana RWQCB through the NPDES permit, wastewater from the project site that is processed through the MVRWRF would meet established standards. As the wastewater from all development within the service area of the MVRWRF would be similarly treated under the NPDES, no cumulatively significant exceedance of Santa Ana RWQCB wastewater treatment requirements would occur. As such, cumulative impacts to wastewater treatment facilities would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.7 Solid Waste Services

6.16.3.8 Solid Waste Facilities

Impact: *The project's incremental contribution to landfill impacts would not cause or contribute to a significant cumulative effec.*

Threshold:	Would the proposed WLC project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?

Cumulative Impact Analysis

The cumulative impact geographic area for solid waste services is the City of Moreno Valley. Solid waste disposal and recycling services for the proposed project site would be provided by Waste Management of the Inland Empire. [3] Waste Management of the Inland Empire separates and markets recyclable materials collected within its service area. The project, in combination with other cumulative projects, would increase the amount of solid waste being transferred to landfills within the City. The volume of solid waste generated by the proposed WLC project per day represents 2.6 percent of the current permitted throughput and 4.5 percent of the current surplus capacity at the Badlands Sanitary Landfill. As adequate daily surplus capacity exists at the receiving landfill, development of the proposed project would not significantly affect current operations or the expected lifetime of the landfill serving

[3] Trash service in the City of Moreno Valley is mandatory and Waste Management of Inland Valley is the only solid waste service provider.

the project area. CEQA documents for other projects in the cumulative scenario have been reviewed and the findings have been considered in this analysis.

AB 939 mandates the reduction of solid waste disposal in landfills. While the Badlands Sanitary Landfill has an estimated closure date of 2024, as previously identified, the City's waste hauler will also use other County landfills in the area (e.g., Lamb Canyon Landfill and El Sobrante Landfill). The estimated closure date of the Lamb Canyon Landfill is 2023 and the estimated closure date of the El Sobrante Landfill is 2030. With planned expansion activities of landfills in the project vicinity and projected growth rates contained in the City's General Plan EIR, sufficient landfill capacity would exist to accommodate future disposal needs through City buildout in 2030. Buildout of the City General Plan would not create demands for solid waste services that would exceed the capabilities of the County's waste management system. Therefore, although the project and cumulative projects would result in an increase in the amount of solid waste sent to landfills, compliance with state and local waste diversion requirements would contribute to the longevity of existing and proposed landfills that would serve the projects and ensure that cumulative impacts would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.16.3.9 Solid Waste Reduction

Impact: *The project's incremental contribution to cumulative solid waste regulation impacts would not cause or contribute to a significant cumulative impact.*

Threshold:	Would the proposed WLC project fail to comply with applicable federal, state, and local statutes and regulations related to solid waste?

Cumulative Impact Analysis

The project, in combination with other cumulative projects, would increase the amount of solid waste being transferred to landfills within the City. Federal, State and local governments have enacted a variety of laws and established programs to deal with the transport, use, storage, and disposal of hazardous materials to reduce the risks to public health and the environment. AB 939 and SB 1016 mandates the reduction of solid waste disposal in landfills. While the Badlands Sanitary Landfill has an estimated closure date of 2024, as previously identified, the City's waste hauler will also use other County landfills in the area (e.g., Lamb Canyon Landfill and El Sobrante Landfill). Additionally, the proposed project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards. CEQA documents for other projects in the cumulative scenario have been reviewed and the findings have been considered in this analysis. The estimated closure date of the Lamb Canyon Landfill is 2023 and the estimated closure date of the El Sobrante Landfill is 2030. With planned expansion activities of landfills in the project vicinity and projected growth rates contained in the City's General Plan EIR, sufficient landfill capacity would exist to accommodate future disposal needs through City buildout in 2030. Buildout of the City General Plan would not create demands for solid waste services that would exceed the capabilities of the County's waste management system. Therefore, although the project and cumulative projects would result in an increase in the amount of solid waste sent to landfills, compliance with state and local waste diversion requirements would contribute to the longevity of existing and proposed landfills that would serve the projects and ensure that cumulative impacts would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significance Level After Mitigation: Less than significant cumulative impact.

6.17 Energy

Cumulative effects to energy are described in this section. A summary of the project's incremental contribution to potential cumulative impacts to energy issues is provided in Section 4.17.1. The geographic and temporal scopes of the cumulative analysis are described in Section 4.17.2. The potential cumulative impacts and the project's contribution to cumulative impacts to each of the energy issues are discussed in Section 6.17.3. In addition, a brief summary of the impact significance of the project's contribution to cumulative impacts for each issue is also provided in Section 4.17.3 as well as applicable mitigation measures and significance determination after mitigation.

The land use assumptions for the identified cumulative projects were taken from either the project-specific information contained in the associated cumulative project CEQA documents, the City of Moreno Valley General Plan, and/or the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) 2040 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Where project-specific information was available for the cumulative projects, it was incorporated into the cumulative impact analysis. Where project-specific information was not available, the underlying General Plan or SCAG RTP/SCS land use designations were used. Where project-specific and planned cumulative project land uses were inconsistent, the more intense land use was utilized. Within Moreno Valley, the cumulative analysis assumed build-out of the City's General Plan except for locations where other past, present, and reasonably foreseeable projects were identified, in which case those were used instead. Because it is unlikely that the City will fully build out by 2040, the cumulative impact analysis assumes a more intense level of cumulative development than is likely to occur and is therefore conservative in the sense that it would over-state cumulative impacts.

The cumulative projects identified in Table 6.17-1 and their respective CEQA documents have been reviewed and evaluated in conjunction with the project to determine if they could contribute to a cumulatively considerable impact to energy. These potentially cumulative impacts are documented in the following section.

6.17.1 Project Impact Findings

Appendix G of the State CEQA Guidelines does not provide specific thresholds for the evaluation of impacts related to energy resources. Appendix F of the CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that an EIR shall include a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

- A project would result in significant impacts with regard to energy use and consumption if it would cause wasteful, inefficient, and unnecessary consumption of energy. In accordance with Appendix F, the following criteria will be considered in determining whether this threshold of significance is met:

    1) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed (Appendix F Section II C-1).

    2) The effects of the project on local and regional energy supplies and on requirements for additional capacity (Appendix F Section II C-2).

    3) The effects of the project on peak and base period demands for electricity and other forms of energy (Appendix F Section II C-3).

    4) The effects of the project on energy resources (Appendix F Section II C-5).

5) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives (Appendix F Section II C-6).

- A project would result in significant impacts with regard to energy use and consumption if it would require the construction of new electrical and/or natural gas facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.
- A project would result in significant impacts with regard to energy use and consumption if it would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. In accordance with Appendix F, the following criteria will be considered in determining whether this threshold of significance is met:

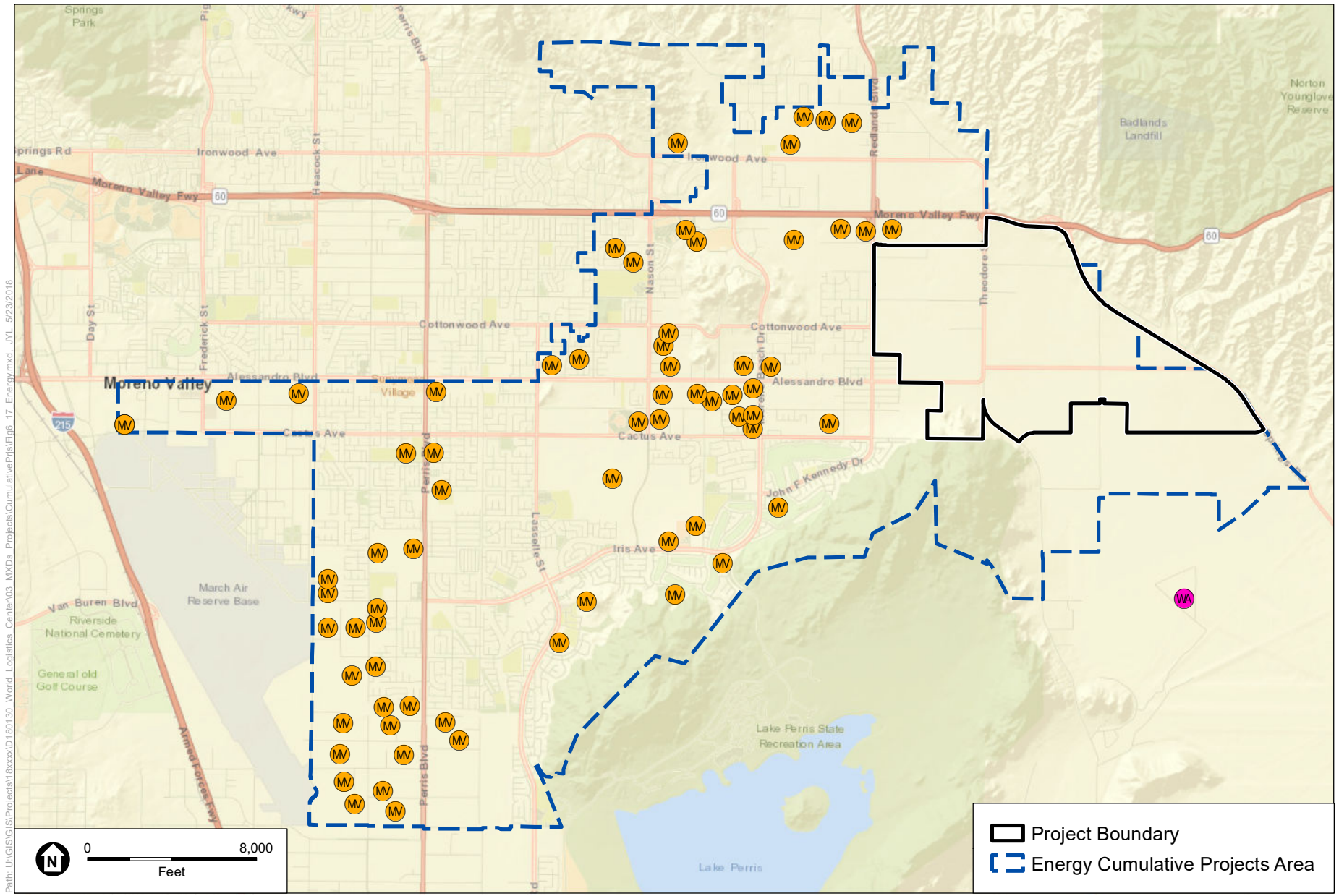
  1) The degree to which the project complies with existing energy standards (Appendix F Section II C-4).

The following project-level conclusions are presented in Section 4.17, regarding whether the project would:

- Result in energy use and consumption that would cause wasteful, inefficient, and unnecessary consumption of energy; **Less than Significan**t.
- Require the construction of new electrical and/or natural gas facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; **Less than Significant.**
- Comply with existing energy standards: **Less than Significant**

6.17.2 Geographic and Temporal Scope

The geographic area for evaluating potential cumulative energy impacts is the Moreno Valley Electric Utility (MVU) service area for electricity, and the State for natural gas and transportation fuel use, shown on Figure 6.17-1 and in the cumulative discussion below. Cumulative impacts to energy could result from the project in conjunction with other past, present and future projects located within the applicable service area for each energy sector. The MVU service area covers over half of the City of Moreno Valley and follows the southern, eastern, and portions of the northern city boundary and is generally south of Alessandro Boulevard and easterly of Nason Street. The MVU service boundary is the appropriate cumulative project area boundary for electricity as the project is located within the MVU service area. Cumulative projects within the identified MVU area will be evaluated with the project to determine if any cumulative electricity impact would occur. The projects located within the cumulative electricity impact area are listed in Table 6.17-1. The project would contribute to cumulative impacts to energy starting when the project begins to demand energy resources and would last for the duration of the project. Very few of the cumulative project CEQA documents identified in Table 6.17-1 quantify the energy use associated with the specific project. As such, Table 6.17-1 only includes the energy use for the projects that were quantified in the respective CEQA document.



SOURCE: ESRI; ESA; Highland Fairview 3/29/2018

World Logistics Center

Figure 6.17-1

Energy Cumulative Projects Area

ESA

Table 6.17-1: Energy Cumulative Projects Summary

Project ID	Project Name	Document Type	Energy Considered	Quantified	Demand (MWh)
MV-3	ProLogis	EIR	No	No	—
MV-4	Westridge Commerce Center	EIR	No	No	—
MV-7	TR33962 / Pacific Scene Homes	ND	No	No	—
MV-8	TR32460 / Sussex Capital	ND	No	No	—
MV-9	TR32459 / Sussex Capital	ND	No	No	—
MV-10	TR30998 / Pacific Communities	ND	No	No	—
MV-11	TR30411 / Pacific Communities	ND	No	No	—
MV-14	TR32548 / Gabel, Cook & Associates	ND	No	No	—
MV-15	TR32218 / Whitney	ND	No	No	—
MV-16	TR32284 / 26thCorporation & Granite Capitol	ND	No	No	—
MV-17	TR31590 / Winchester Associates	ND	No	No	—
MV-18	Convenience Store / Fueling Station	ND	No	No	—
MV-19	Senior Assisted Living	ND	No	No	—
MV-20	Moreno Marketplace	ND	No	No	—
MV-21	PEN16-0053 Medical Center	MND	No	No	—
MV-22	TR36882 (PA15-0010) SFR	MND	No	No	—
MV-24	TM 36436 (PA12-0005)	MND	No	No	—
MV-25	TR32142	ND	No	No	—
MV-27	TR32917 / Empire land	ND	No	No	—
MV-28	TR34329 / Granite Capitol	ND	No	No	—
MV-29	TR36340	ND	No	No	—
MV-30	PA03-0168 TR 31517	ND	No	No	—
MV-32	TTM 31592 (P13-078) SFR	ND	No	No	—
MV-33	TR32645 / Winchester Associates	ND	No	No	—
MV-34	TR34397 / Winchester Associates	ND	No	No	—
MV-35	TR31771 / Sanchez	ND	No	No	—
MV-36	TM 31618 (PA03-0106)	EIR	No	No	—
MV-37	Vogel /PA09-004	EIR	No	No	—
MV-39	VIP Moreno Valley (SaresRegis/Vogel)	EIR	No	No	—
MV-41	First Nandina Logistics Center	EIR	Yes	Yes	4,528
MV-42	Indian Street Commerce Center	EIR	Yes	No	—
MV-43	Ivan Devries / PA06-0017	ND	No	No	—
MV-44	Modular Logistics Center (Kearny RE Co)	EIR	Yes	Yes	3,575
MV-45	Iris Plaza	IS	No	No	—
MV-47	PA07-0129 TR 35606 SFR	Exempt	No	No	—
MV-48	PA11-001 thru 007, March Business Center (Industrial Area SP)	EIR	Yes	No	—
MV-49	PA07-0079/0080/0093, & 0121 and PA08-0018, Indian Business Park, (Industrial Area SP)	MND	No	No	—

Project ID	Project Name	Document Type	Energy Considered	Quantified	Demand (MWh)
MV-50	San Michele Industrial Center, (Industrial Area SP)	ND	No	No	—
MV-51	Nandina Distribution Center IDS	MND	No	No	—
MV-52	First Industrial III & IV, (Industrial Area SP)	MND	No	No	—
MV-53	I-215 Logistics Center (Amazon)	MND	No	No	—
MV-54	Moreno Valley Logistics Center (Prologis)	EIR	Yes	Yes	15,536
MV-55	MV Commerce Park II (Alere) - Built before 2012		No	No	—
MV-56	Tract Map 33810	Exempt	No	No	—
MV-57	Tract Map 34151	ND	No	No	—
MV-58	Tract Map 33024	ND	No	No	—
MV-59	Tract Map 31442	ND	No	No	—
MV-60	Tract Map 36401	MND	No	No	—
MV-61	Walmart & Gas Station	EIR	No	No	—
MV-63	PA14-0053 (TTM 36760) Legacy Park	MND	No	No	—
MV-65	TR33607 / TL Group	ND	No	No	—
MV-66	TR34988 / Stratus Properties	ND	No	No	—
MV-67	TR32515	ND	No	No	—
MV-68	PA07-0035	ND	No	No	—
MV-69	PA07-0039, (Industrial Area SP)	ND	No	No	—
MV-74	TR34216 / Creative Design Associates		No	No	—
MV-75	Aqua Bella Specific Plan	EIR	No	No	—
MV-78	Overton Moore Properties PA08-0072	MND	No	No	—
MV-79	Shaw Development	MND	No	No	—
MV-80	PA15-0032 MV Cactus Center	MND	No	No	—
MV-81	Ridge Property Trust, PA07-0147 & PA 07-0157	ND	No	No	—
MV-84	PA16-0075 Brodiaea Business Center	ND	No	No	—
MV-85	Retail Center / Winco Foods, PA08-0079/0080/0081	ND	No	No	—
MV-86	TR32505 / DR Horton	ND	No	No	—
MV-88	TR33771 / Creative Design Associates	Exempt	No	No	—
MV-89	TR35663 / Kha	Exempt	No	No	—
MV-91	TR31305 / Richmond American	ND	No	No	—
MV-92	TR 33256	ND	No	No	—
MV-93	PA14-0042 Edgemont Apartments	EIR	No	No	—
MV-94	PA15-0002 Box Springs Apartments	MND	No	No	—
MV-95	Moreno Beach Marketplace / Lowes	MND	No	No	—
MV-96	31394 Pigeon Pass, Ltd.	ND	No	No	—

Project ID	Project Name	Document Type	Energy Considered	Quantified	Demand (MWh)
MV-97	32005 Red Hill Village, LLC	ND	No	No	—
MV-98	33388 SCH Development, LLC	ND	No	No	—
MV-100	Scottish Village	ND	No	No	—
MV-103	Gateway Business Park	MND	No	No	—
MV-106	35304 Jimmy Lee	ND	No	No	—
MV-110	TM 33417	ND	No	No	—
MV-111	35769 Michael Chen	Exempt	No	No	—
MV-112	PA09-0006 Jim Nydam	Exempt	No	No	—
MV-113	Ironwood Residential	MND	No	No	—
MV-114	Stoneridge Town Centre - Vacant Restaurant	ND	No	No	—
MV-116	31621 Peter Sanchez	ND	No	No	—
MV-117	Riverside County Office Building	ND	No	No	—
MV-118	28860 Professor's Fun IV, LLC/Winchester Associates, Inc.	ND	No	No	—
MV-119	32126 Salvador Torres	ND	No	No	—
SJWA-1	San Jacinto Wildlife Land Management Plan	EIR	Yes	No	—

6.17.3 Cumulative Impact Evaluation

6.17.3.1 Energy Consumption, Supply, Standards and Facilities

Impact: *The Project would not result in environmental impacts related to energy consumption, supply, energy standards and expansion of facilities.*

Threshold:	Would the project result in energy use and consumption that would cause wasteful, inefficient, and unnecessary consumption of energy? Would the project require the construction of new electrical and/or natural gas facilities or expansion of existing facilities, the construction of which would cause significant environmental effects? Would the project comply with Existing Energy Standards?

Cumulative Impact Analysis

Electricity
The geographic context for the cumulative analysis of electricity is MVU's service area. Growth within this geography is anticipated to increase the demand for electricity and the need for infrastructure, such as new or expanded facilities.

Buildout of the Project, the cumulative projects, and additional growth forecasted to occur in the City would increase electricity consumption during Project construction and operation, and may cumulatively increase the need for electricity supplies. MVU forecasts that its peak demand in 2024, the latest available forecast from the IRP, would be approximately 352,044 MWh/year. The Project's estimated net new electrical consumption would account for between 47 to 73 percent of MVU's projected electricity sales in 2025 depending on the EV scenario. As stated in Section 4.17, *Energy*, since the

2015 IRP only forecasts out to 2024, projecting electricity use and supply for the full buildout 2040 Scenarios would also be highly speculative. The utility has a considerable amount of time to procure energy resources in anticipation of the Project's development, and has committed to taking the WLCSP needs into consideration in future IRP development.

As the utility provider for the Project and cumulative projects, MVU has determined that the increased electricity demand would be minor compared to existing supply and infrastructure within its service area and would be consistent with growth expectations for its service area. MVU's 2015 IRP predicts an increase in electricity demand over a 10-year period that is planned to be met by increasing solar, wind, and geothermal power, and supplementing with natural gas as needed. MVU's IRP specifically mentions World Logistics Center and states that, "a portion of the anticipated demand [of the Project] is incorporated in MVU's load forecast. MVU will monitor development progress at the World Logistics Center and other local projects to determine potential impacts to customer energy requirements".[1] MVU forecasts projected growth in the region and with its 2015 IRP already has plans in place that account for future development including the Project and cumulative projects. Many of the identified cumulative project CEQA documents, including MV 2 and MV 3, evaluated the cumulative energy impacts, and that analysis has been incorporated into this assessment.

Furthermore, like the Project, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate mitigation measures, as necessary. Although the phrase "rolling blackouts" is a household phrase and heat waves in 2017 registered record-setting elevated temperatures, the electrical grid largely holds strong. As discussed above and based on evidence from MVU, the Project would not have a cumulatively considerable impact on existing energy resources either individually or incrementally when considering the anticipated growth in the service area. Accordingly, the impacts related to electricity consumption would not be cumulatively considerable, and thus would be less than significant.

Natural Gas

The geographic context for the cumulative analysis of natural gas is the State. Growth within this geography is not anticipated to increase the demand for natural gas and the need for infrastructure, such as new or expanded facilities.

Though electricity usage is predicted to rise, natural gas demand is expected to decline overall from 2016-2035 accounting for population and economic growth as well as efficiency improvements and the State's transition away from fossil fuel-generated electricity to increased renewable energy. SoCalGas predicts a decline in every sector (residential, industrial, commercial, electricity generation, and vehicular), with the exception of wholesale and international gas sales to Mexico. The 2016 California Gas Report states, "SoCalGas projects total gas demand to decline at an annual rate of 0.6% from 2016 to 2035. The decline in throughput demand is due to modest economic growth, CPUC-mandated energy efficiency (EE) standards and programs, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI)."[2] Buildout of the Project and cumulative projects in the Statewide service area is not expected to increase natural gas consumption and the need for natural gas supplies from building energy.

Natural gas consumption from the Project was compared to Statewide natural gas fuel consumption since natural gas as a fuel can be procured from anywhere and is not limited to the service provider's resources. Natural gas consumption would primarily be from operation of on-site equipment and the planned CNG/LNG fueling station which will be publicly accessible. The combined annual natural gas use would represent 0.003 percent of the State's total natural gas use.

[1] Moreno Valley Utility, Integrated Resource Plan (2015).

[2] California Gas and Electric Utilities, *2016 California Gas Report.* https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf. Accessed May 2018.

Although future development projects would result in use of nonrenewable natural gas resources which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCal Gas's service area and would not strain Statewide natural gas resources. Further, like the Project, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards in Title 24, and incorporate mitigation measures, as necessary. While initially the Project and cumulative projects could result in increased natural gas demand compared to existing uses on each specific project site, the overall demand for natural gas over time is expected to decline due to increases in regional natural gas efficiencies and the transition to renewable energy on a statewide basis displacing fossil fuels including natural gas. Therefore, the Project would not have a cumulatively considerable impact related to natural gas consumption, and impacts would be less than significant.

Transportation Energy

Buildout of the Project and cumulative projects in the region would be expected to increase overall VMT; however, the effect on transportation fuel demand would be minimized by future improvements to vehicle fuel economy pursuant to federal and state regulations. By 2025, vehicles are required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 2012-2016 standard of 35.5 mpg. As discussed in detail in Section 4.07, *Greenhous Gas Emissions*, the Project would be consistent with the 2016 RTP/SCS for the region. Cumulative projects would need to demonstrate consistency with the goals in the 2016 RTP/SCS and incorporate project design features or mitigation measures as required under CEQA, which would also ensure cumulative projects contribute to transportation energy efficiency.

Furthermore, according to the USEIA's International Energy Outlook 2016, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040.[3] CARB's analyses and the State's 2017 Climate Change Scoping Plan show a 45 percent decrease in fossil fuel demand by 2030.[4] The State's Mobile Source Strategy aims to displace fossil fuel reliant vehicles with 1.5 million zero emission vehicles (ZEVs) by 2025 and 4.2 million ZEVs by 2030.[5] Considering the State's goals of displacing transportation fuels, overall fossil fuel use will decrease and the current refining capacity would be sufficient to support the demand of the Project and cumulative projects. Furthermore, the Project's annual gas and diesel consumption from construction and operation would represent approximately 0.04 percent of Statewide diesel sales and 0.0004 percent of Statewide gasoline sales in both 2025 and 2040.[6][7] Therefore, as the Project would incorporate land use characteristics consistent with state goals for reducing VMT and would represent a small fraction of State transportation sales, the Project would not have a cumulatively considerable impact related to transportation energy, and impacts would be less than significant.

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3 EIA, International Energy Outlook 2016, https://www.eia.gov/outlooks/ieo/pdf/0484(2016).pdf , Accessed April 2018.

4 CARB, *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November, 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf; Accessed May 2018.

5 CARB, *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November, 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf; Accessed May 2018.

6 United States Energy Information Administration, Table F3: Motor Gasoline Consumption, Price, and Expenditure Estimates, 2015. Available at: http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA. Accessed May 2018.

7 United States Energy Information Administration, Table F7: Distillate Fuel Oil Consumption Estimates, 2015. Available at: http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_fuel/html/fuel_use_df.html&sid=CA. Accessed May 2018.

Conclusion

The cumulative condition related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation does not reflect a significant adverse cumulative impact. As detailed above, the project's incremental contribution to the cumulative condition would not cause or contribute to a significant impact. Accordingly, the Project would not result in cumulative environmental impacts related to energy consumption, supply, energy standards and expansion of facilities, and the cumulative energy impacts would be less than significant.

Significance Level Before Mitigation: Less than significant impact.

Mitigation Measures: No mitigation measures required.

Significant Level After Mitigation: Less than significant impact.

NOTE TO READERS: The Revised Sections of the Final EIR (FEIR) sets forth those portions of Section 7.0 that have been revised. The absence of any reference to a portion of Section 7.0 means that the corresponding portion of Section 7.0 in the FEIR remains unchanged or has been deleted. However, where appropriate, unrevised portions of the FEIR have been included for ease of understanding.

7.0 ALTERNATIVES TO THE PROPOSED PROJECT

8.0 REFERENCES

NOTE TO READERS: This portion of the Revised Sections of the FEIR sets forth those portions of each section within Section 7.0 of the 2015 FEIR which has been revised. The revised cumulative analysis can be found in Section 8.0 of this Revised Sections of the FEIR. The absence of any reference to a portion of Section 7.0 of the 2015 FEIR means that the corresponding portion of Section 7.0 in the FEIR remains unchanged or has been deleted.

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8.2 Acronyms and Abbreviations

§	Section
§§	Subsection
°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	Micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACC	Andrew Chang and Company
ACM	Asbestos-Containing Material
AF	acre-feet
AFRES	Air Force Reserve
AFV	Alternative Fuel Vehicle
AFY	acre feet per year
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
amsl	above mean sea level
A-P Act	*Alquist-Priolo Earthquake Fault Zoning Act*
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
AST	Aboveground Storage Tank
Basin	South Coast Air Basin
BAU	Business As Usual
BDCP	Bay Delta Conservation Plan
BMP	Best Management Practice
BP	Business Park
BV&A	Bear Valley and Alessandro Development Company
BVIC	Bear Valley Irrigation Company
BVLWC	Bear Valley Land and Water Company
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency

CalFire	California Department of Forestry and Fire Protection
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historic Resources
Caltrans	California Department of Transportation
CAPSSA	Criteria Area Plant Species Survey Area
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CASSA	Criteria Area Species Survey Area
CAT	California Climate Action Team
CBC	California Building Code
CBOC	California Burrowing Owl Consortium
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFG	California Department of Fish and Game, former name of the California Department of Fish and Wildlife
CDFW	California Department of Fish and Wildlife, formerly known as the California Department of Fish and Game
CDGB	Community Development Block Grant
CDMG	California Department of Mines and Geology
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation Liability Act
CESA	California Endangered Species Act
CFCs	chlorofluorocarbons
CFR	Code of Federal Regulations
CFS	calls for service
cfs	cubic feet per second
CGP	Construction General Permit
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CIP	Capital Improvement Plan
CIWMB	California Integrated Waste Management Board
CLUP	Comprehensive Land Use Plan

CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNG	Compressed Natural Gas
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COA	Coordinated Operations Agreement
CPD	(HUD Office of) Community Planning and Development
CPUC	California Public Utilities Commission
CRA	California Resource Agency
CRA	Cultural Resource Assessment
CSC	California Species of Concern
CUPA	Certified Unified Program Agency
CUWCC	California Urban Water Conservation Council
CVC	California Vehicle Code
CVP	Central Valley Project
CWA	(Federal) Clean Water Act
CWC	California Water Code
DAMP	Drainage Area Management Plan
dB	decibel
dBA	decibel on the A-weighted scale
DBESP	Determination of a Biologically Equivalent or Superior Preservation
DCIA	Directly Connected Impervious Area
DE	Diesel Emissions
DEH	Department of Environmental Health
DHS	(California) Department of Health Services
DIF	Development Impact Fee
DMM	Demand Management Measure
DMP	Drainage Master Plan
DOC	(California) Department of Conservation
DOF	(California) Department of Finance
DTA	David Taussig & Associates, Inc.
DTSC	(California) Department of Toxic Substance Control
DWR	(California) Department of Water Resources

e.g.	*exemplī grātiā*, for example
ECSD	Edgemont Community Services District
EDR	Environmental Data Resources
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMWD	Eastern Municipal Water District
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act
ESA	Environmental Site Assessment
ESG	Emergency Solutions Grant
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
ft	foot/feet
FTA	Federal Transit Administration
FTE	full-time equivalent
GCC	Global Climate Change
GHG	Greenhouse gas
GIS	Geographic Information Systems
GPA	General Plan Amendment
gpd	gallons per day
gpf	gallons per flush
GWP	Global Warming Potential
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCD	(California) Department of Housing and Community Development
HCM	*Highway Capacity Manual*
HCP	Habitat Conservation Plan
HFCP	Highland Fairview Corporate Park
HHWE	Household Hazardous Waste Element
HI	Hazard Indices

HMB	Hazardous Materials Branch
HMBEP	Hazardous Materials Business Emergency Plan
HMMA	Hazardous Materials Management Act
HMMP	Habitat Mitigation and Monitoring Plan
HNL	Hourly Noise Level
HOME	HOME Investment Partnership
HOPWA	Housing Opportunities for Persons with AIDS
hp	horsepower
HRA	Health Risk Assessment
HSA	Hydrologic Subarea
HSC	Health and Safety Code
HUD	Housing and Urban Development
HVAC	Heating, Ventilating, and Air Conditioning
HWCL	Hazardous Waste Control Law
Hz	hertz
i.e.	*id est*, that is
IMPLAN	Impact Analysis for Planning
IPCC	United Nations Intergovernmental Panel on Climate Change
IRP	Integrated Resources Plan
IS	Initial Study
ITE	Institute of Transportation Engineers
kV	kilovolt
LAFCO	Local Agency Formation Commission
LAPM	Los Angeles pocket mouse
LBP	Lead-Based Paint
LBRMP	Logistic Building Runoff Management Plan
lbs	pounds
LCC	Land Capability Classification
LD	Logistics Development
L_{dn}	day-night average noise
LE	Land Evaluation
LEED	Leadership in Energy and Environmental Design
L_{eq}	Equivalent continuous sound level (L_{eq})
LESA	(California) Land Evaluation and Site Assessment
LHMP	Local Hazard Mitigation Plan

LI	Light Industrial
LID	Low Impact Development
LL	Light Logistics
L_{max}	maximum noise level
LNG	Liquefied Natural Gas
LNG/CNG	liquefied natural gas/compressed natural gas
LOS	Level of Service
~~LS~~	~~Logistics Support~~
LSA	LSA Associates, Inc.
LST	Local Significance Threshold
MARB	March Air Reserve Base
MATES	Multiple Air Toxics Exposure Study
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
MC	Municipal Code
Metropolitan	Metropolitan Water District of Southern California
mgd	million gallons per day
MHSP	Moreno Highlands Specific Plan
MICR	maximum individual cancer risk
MIP	March Inland Port
MJPA	March Joint Powers Authority
mm/yr	millimeters per year
MMDP	Moreno Master Drainage Plan
MMRP	Mitigation Monitoring and Reporting Program
mmt	million metric tons
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MPOA	Master Property Owners Association
MPT	Master Plan of Trails
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer Systems
MSHCP	(Western Riverside County) Multiple Species Habitat Conservation Plan
mt	metric tons

mty	metric tons per year
MVEU	Moreno Valley Electric Utility
MVFD	Moreno Valley Fire Department
MVHS	Moreno Valley Historical Society
MVPD	Moreno Valley Police Department
MVRWRF	Moreno Valley Regional Water Reclamation Facility
MVUSD	Moreno Valley Unified School District
MW	megawatt
MWh	megawatt-hours
N_2O	nitrous oxide
NA	Native American
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAIOP	National Association of Industrial and Office Properties
National Register	National Register of Historic Places
NCCP	Natural Communities Conservation Plan
NDDB	Natural Diversity Data Base
NDFE	Nondisposal Facility Element
NEPA	National Environmental Policy Act
NEPSSA	Narrow Endemic Plant Species Survey Area
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHTSA	Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NO_2	Nitrogen Dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCP	Noise Reduction Compliance Plan
NRCS	Natural Resource Conservation Service
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation

OHWM	Ordinary High Water Mark
OMB	(White House) Office of Management and Budget
OPR	Office of Planning and Research
OS	Open Space
PAH	Polycyclic Aromatic Hydrocarbon
Pb	Lead
PCBs	polychlorinated biphenyls
PEA	Preliminary Environmental Assessment
PM_{10}	Particulate Matter with a Diameter of 10 Microns or Less
$PM_{2.5}$	Particulate Matter with a Diameter of 2.5 Microns or Less
POTWs	Publicly Owned Treatment Works
POU	Publically Owned Utility
ppb	parts per billion
ppm	parts per million
PSB	Public Safety Building
PUC	Public Utilities Commission
PVC	Polyvinyl Chloride
PVCCSP	Perris Valley Commerce Center Specific Plan
PVSC	Perris Valley Storm Channel
PWC	Public Works Committee
PWQMP	Preliminary Water Quality Management Plan
PZ	Pressure Zone
q.v.	*quod vidē*, which see (presented elsewhere in the document)
RCA	Resource Conservation Agency
RCB	reinforced concrete box
RCC	Riverside Community College
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCIP	Riverside County Integrated Project
RCIWMP	Riverside Countywide Integrated Waste Management Plan
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RCTC	Riverside County Transportation Commission
RHNA	Regional Housing Needs Assessment

RivTAM	Riverside County Traffic Analysis Model
ROG	Reactive Organic Gas
RPR	(California) Rare Plant Ranking
RPS	Renewables Portfolio Standard
RPW	Relatively Permanent Water
RSHA	Regional System of Highways and Arterials
RTA	Riverside Transit Agency
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
SA	Site Assessment
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SEDAB	Southeast Desert Air Basin
sf	square foot/feet
SF_6	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJUSD	San Jacinto Unified School District
SJWA	San Jacinto Wildlife Area
SKR	Stephens' kangaroo rat
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SMARA	Surface Mining and Reclamation Act
SO_2	Sulfur Dioxide
SO_X	Sulfur Oxides
SP	Service Population
SR-60	State Route 60

SRRE	Source Reduction and Recycling Element
SSURGO	Soil Survey Geographic
STC	Sound Transmission Class
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWQCB	State Water Quality Control Board
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAF	thousand acre-feet
TASAS	Traffic Accident Surveillance and Analysis System
TCM	Transportation Control Measures
TCP	Traditional Cultural Place
TDM	Transportation Demand Management
TDS	Total Dissolved Solids
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TMDL	Total Maximum Daily Load
TNW	Traditional Navigable Water
tpy	tons per year
TRI	Toxics Release Inventory
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
UC	University of California
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VAV	Variable Air Volume
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

VRP	Visibility-Reducing Particles
WDR	Wastewater Discharge Requirement
WLC	World Logistics Center
WLCSP	World Logistics Center Specific Plan
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WSA	Water Supply Assessment
WSP	Water Shortage Plan
ZOI	Zone of Influence

8.3 Glossary of General Terms

Acre-Foot. An acre-foot is the quantity of volume of water that covers one acre to a depth of one foot; equal to 43,560 cubic feet or 325,851 gallons.

Aesthetics. The perception of artistic elements, or elements in the natural or human-made environment that are pleasing to the eye.

Air Quality Criteria. Air quality criteria are the levels of pollution and length of exposure at which adverse effects on health and welfare occur.

Air Quality Standards. Air quality standards are the prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

Ambient Noise. Ambient noise is the composite of noise from all sources near and far. The ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Applicant. An applicant is a person who proposes to carry out a project that needs a lease, permit, license, certificate, or other entitlement, for use or financial assistance from one or more public agencies.

Arterial. An arterial is a major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to non-residential properties.

Attainment. Attainment means that there is compliance with State and Federal ambient air quality standards within an air basin.

A-Weighted Decibel (dBA). The dB on the A-weighted scale is the sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.

California Environmental Quality Act (CEQA). Enacted in 1970, CEQA requires State and local agencies to estimate and evaluate the environmental implications of their actions. It aims to prevent environmental effects of the agency actions by requiring agencies, when feasible, to avoid or reduce the significant environmental impacts of their decisions. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project (*California Public Resources Code* §§21000 et seq.)

Capacity. The maximum rate of flow at which vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.

Collector. Relatively low-speed, low-volume street that provides circulation within and between neighborhoods. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network.

Community Noise Equivalent Level (CNEL). A 24-hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 dBA applied to the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods, respectively, to allow for greater sensitivity to noise during these hours.

Congestion Management Plan (CMP). A mechanism employing growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/housing balance strategies, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development.

Cumulative Impact. As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

Day-Night Average Level (L_{dn}). The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m. (Note: CNEL and L_{dn} represent daily levels of noise exposure averaged on an annual or daily basis, while L_{eq} represents the equivalent energy noise exposure for a shorter time period, typically one hour.)

Decibel (dB). The decibel (dB) is the unit of level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.

Emission Standard. The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Environment. In CEQA, the environment are "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

Environmental Impact Report (EIR). A report required pursuant to the California Environmental Quality Act that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts.

Equivalent Energy Level (L_{eq}). L_{eq} is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. L_{eq} is typically computed over 1-hour, 8-hour, and 24-hour sample periods.

Feasible. To be feasible, according to CEQA, means to be capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors.

Findings. Findings required by CEQA are the conclusions made regarding the significance of a project in light of its environmental impacts. A Statement of Overriding Considerations does not obviate the need to make other required CEQA findings.

Floor Area Ratio (FAR). The FAR is the gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net square feet of land area, a floor area ratio of 1.0 will allow a maximum of 10,000 gross square feet of building floor area to be built. On the same site, an FAR of 1.5 would allow 15,000 square feet of floor area; an FAR of 2.0 would allow 20,000 square feet; and an FAR of 0.5 would allow 5,000 square feet. Also commonly used in zoning, FARs typically are applied on a parcel-by-parcel basis as opposed to an average FAR for an entire land use or zoning district.

Floor Area, Gross. The sum of the horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including any space where the floor-to-ceiling height is less than six feet. Some cities exclude specific kinds of space (e.g., elevator shafts and parking decks) from the calculation of gross floor area.

Freeway. A freeway is a high-speed, high-capacity, limited-access road serving regional and countywide travel. Such roads are free of tolls, as contrasted with turnpikes or other toll roads. Freeways generally are used for long trips between major land use generators. Major streets cross at a different grade level.

Incorporation by Reference. "Incorporation by reference" is a CEQA term meaning reliance on a previous environmental document for some portion of the environmental analysis of a project. See *CEQA Guidelines* §15150.

Initial Study. An Initial Study is a preliminary CEQA analysis that can be prepared by a Lead Agency to determine whether an EIR or Negative Declaration must be prepared, and identifying the significant environmental effects to be analyzed in an EIR.

Land Use. Any land use is the determination by a governing authority of the use to which land within its jurisdiction may be put so as to promote the most advantageous development of the community.

Lead Agency. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The Lead Agency decides whether an EIR or Negative Declaration is required for a project, and causes the appropriate document to be prepared.

Level of Service (LOS). LOS is a qualitative measure describing operational conditions within a traffic stream and how motorists and/or passengers perceive them.

Maximum Noise Level (L_{max}). The maximum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.

Mitigation Measure. A mitigation measure is a change in a project designed to avoid, minimize, rectify, reduce, or compensate for a significant environmental impact.

Mitigation Monitoring and Reporting Program (MMRP). When a lead agency adopts a mitigated negative declaration or an EIR, it must adopt a program of monitoring or reporting which will ensure that mitigation measures are implemented. (See CEQA Statute §21081.6(a) and *CEQA Guidelines* §§15091(d) and 15097.)

Noise. Noise is any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying (unwanted sound).

Noise Contours. Noise contours are lines drawn about a noise source indicating equal levels of noise exposure.

Notice of Determination (NOD). An NOD is a brief notice filed with the State Clearinghouse to document project approval. The filing of the NOD starts the statute of limitations period. (See *CEQA Guidelines* §15373.)

Notice of Preparation (NOP). An NOP is a brief notice to notify the public, Responsible and Trustee Agencies that an EIR is being prepared for a project. The notice serves to solicit guidance from those agencies and the public about the scope and content of the environmental information to be included in the EIR. (See *CEQA Guidelines* §15375.)

Peak Hour. The hour of highest traffic volume on a given section of roadway between 7:00 a.m. and 9:00 a.m. or between 4:00 p.m. and 6:00 p.m.

Programmatic EIR. A programmatic EIR is an EIR that examines the impacts that would result from a conceptual plan or policy action envisioned by the lead agency, which is carried out at a more general level of analysis based upon the development information available. (See C*EQA Guidelines* §15161.)

Project. According to CEQA, a project is the whole of an action that has the potential to result in significant environmental change in the environment, directly or ultimately. (See *CEQA Guidelines* §15378.)

Project Description. A project description describes the basic characteristics of the project including location, need for the project, project objectives, technical and environmental characteristics, project size and design, project phasing and required permits. The level of detail provided in the project description varies according to the type of environmental document prepared.

Project EIR. A project EIR is an EIR that examines the impacts that would result from development of a specific project. (See C*EQA Guidelines* §15161.)

Public Hearing. A public hearing is a mechanism for providing the public an opportunity to comment on and present evidence relating to a proposed project and its Draft EIR.

Responsible Agencies. According to CEQA, responsible agencies are all public agencies other than the Lead Agency that have discretionary approval power over the project. (See *CEQA Guidelines* §15381.)

Reviewing Agencies. Reviewing agencies are local, State, and Federal agencies with jurisdiction over the project area or resources potentially affected by the project. Cities and counties are also considered reviewing agencies.

Scoping Meeting. A scoping meeting is an optional meeting pursuant to CEQA in which the lead agency meets with members of the public or agency representatives after the Notice of Preparation has been issued to discuss environmental issues related to a project. Scoping sessions provide the opportunity to discuss environmental issues, project alternatives and potential mitigation measures that may warrant in-depth analysis in the environmental review process.

Sensitive Receptors. Sensitive receptors are people or institutions with people that are particularly susceptible to illness from environmental pollution, such as the elderly, very young children, people already weakened by illness (e.g., asthmatics), and persons engaged in strenuous exercise.

Significant Effect on the Environment. A significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (*CEQA Guidelines* §15382).

Thresholds of Significance. Thresholds of significance are criteria for each environmental issue area to assist with determinations of significance of project impacts. They are based on *CEQA Guidelines* Appendix G.

Trustee Agency. According to CEQA, a Trustee agency is a State agency that has jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. (See *CEQA Guidelines* §15386.)

Volume (Transportation). The volume of traffic is the total number of vehicles that pass over a given point or section of a roadway during a given time interval. Volumes may be expressed in terms of annual, daily, hourly, or sub-hourly periods.

Wastewater. Wastewater is water carrying dissolved or suspended solids from homes, farms, businesses, and industries. The wastewater treatment process includes any process that modifies characteristics of the wastewater, usually for the purpose of meeting effluent standards.

Zoning. Regulation by zone districts of the height, use, and area of structures, the use of land, and the density of population and intensity of allowable uses.

8.4 Glossary of Project-Specific Definitions

The following definitions are excerpts from Section 3.4, *Project Description*.

Annexation Area: This term refers to an 85-acre parcel located adjacent to Gilman Springs Road that is to be annexed into the City of Moreno Valley. The parcel is already within the City's adopted Sphere of Influence adopted on November 21, 1985.

CDFW Conservation Buffer Area: This term refers to a 910-acre parcel owned by the State of California as part of the San Jacinto Wildlife Area (SJWA). This land is within the City of Moreno Valley and is included in the approved Moreno Highlands Specific Plan. That plan designates this property for a broad mix of urban uses including suburban residential, schools, parks, and roads. This land was purchased by the State in 1991 to act as a buffer between the sensitive biological resources of the SJWA and the future urban development under the Moreno Highlands Specific Plan. This land has been actively farmed for many decades and most of it remains in active production. The southwestern portion contains areas of non-native grasslands, although aerial photographs show that this area has been intermittently tilled over the last 80 years. This property is included in the General Plan Amendment and the Zone Change to replace the current urban land uses that are permitted and replace them with Open Space and Public Facility designations. This property is not within the proposed World Logistics Center Specific Plan. This Buffer Area is a large part of the "Other Project Areas" described herein.

General Plan Amendment: One of the proposed entitlements is a General Plan Amendment (GPA) that will permit the establishment of logistics land uses on the 3,714-acre property located east of Redlands and south of SR-60. The following General Plan Elements will be amended: Community

Development; Circulation; Parks, Recreation, and Open Space; Safety; Conservation; and General Plan Goals and Objectives. The GPA will replace the current Moreno Highland Specific Plan/General Plan Designations with the following land use designations: (a) 2,610 acres for high cube logistics development; (b) 1,084 acres of Open Space; and (c) 20 acres for Public Facilities.

Moreno Highlands Specific Plan: This term refers to the currently approved Specific Plan that covers 3,038 acres of the project area. This Specific Plan permits the development of a master planned, mixed-use community consisting of up to 7,763 residential dwelling units and approximately 603 acres of business, retail, institutional, and other uses. This development will be replaced with the World Logistics Center Specific Plan and 1,104 acres of Open Space and Public Facilities uses.

Off-site Analysis Zone: This term refers to an approximately 1,000-foot wide zone adjacent to the south and east boundaries of the Specific Plan area that was studied by Michael Brandman Associates (MBA) as part of the assessment of potential impacts on biological resources. It covers approximately 1,637.5 acres.

Off-site Improvement Areas: Development under the Specific Plan will require construction of a number of offsite infrastructure improvements covering approximately 104 acres of land adjacent to the Specific Plan Site including, but not limited to the following facilities (see Figure 3.7):

Debris Basins easterly of Gilman Springs Road;

Water reservoirs and access roads located northeast, north, and west of the project site;

SR-60 interchange improvements; and

Roadway, water, sewer, drainage, and utility improvements extending north and west from the project.

Other Project Areas: The San Diego Gas & Electric Company (SDG&E) and the Southern California Gas Company (SCGC) own a total of 194 acres of land immediately south of the Specific Plan site. These properties are included in the proposed General Plan Amendment and the Zone Change to designate them for Open Space and Public Facilities uses. These designations are consistent with present uses. These properties are not within the proposed World Logistics Specific Plan. Approximately 174 acres of the land owned by SDG&E will be designated as Open Space. Nineteen acres of SDG&E land and one acre of SCGC land will be designated as Public Facilities.

Project Site or Project Area: This term refers to the entire 3,818-acre area covered by the EIR encompassed by: (a) the Specific Plan Area (2,610 acres); (b) the CDFW Conservation Buffer Area (910 acres); c) the Public Facilities Lands area (194 aces); and (d) the Off-site Improvement Area on 104 acres.

Proposed Project or World Logistics Center Project: General term applied to all of the entitlements outlined above that are addressed in this EIR, including:

WLC Specific Plan	2,610 acres
General Plan Amendment	3,714 acres
Zone Change	3,714 acres
Tentative Parcel Map	1,539 acres
Annexation	85 acres
Off-site improvements	104 acres

Specific Plan Site: Approximately 2,610 acres of the project area are included in the proposed World Logistics Center (WLC) Specific Plan, located generally south of the SR-60 Freeway, east of Redlands Boulevard, west of Gilman Springs Road, and north of the San Jacinto Wildlife Area.

State Lands: Refers to lands owned by the State of California and includes the San Jacinto Wildlife Area (SJWA) located south of the Specific Plan Site, and the Lake Perris State Recreation Area (LPSRA) located southwesterly of the Specific Plan Site.

Tentative Parcel Map Area: A Tentative Parcel Map is being processed to subdivide 1,539 acres of the project for financing purposes only. This property is owned by the project applicant. Approval of the map will confer no development rights to the property.

WLC Specific Plan: The WLC Specific Plan proposes a master-planned logistics campus to include up to 40.4 million square feet of high-cube logistics warehousing, up to 200,000 square feet of light logistics uses, a site for logistics support uses (LS designation) and 74.3 acres of Open Space in the southwest corner of the site. The Specific Plan includes extensive development standards, design guidelines and review procedures for all development within the project.

World Logistics Center Project: The term refers to all related development and planning activities currently proposed by Highland Fairview in the Rancho Belago area of the eastern end of the City of Moreno Valley. The WLC property is generally located south of the State Route 60 freeway, east of Redlands Boulevard, west of Gilman Springs Road, and north of Mystic Lake and the San Jacinto Wildlife Area.

Zone Change: The project includes a Zone Change covering 3,714 acres which will designate 1,084 acres of land for Open Space (CDFW and SDG&E properties), 20 acres for Public Facilities (SDG&E, SCGC properties) and 2,610 acres for the World Logistics Center Specific Plan.

9.0 LIST OF PREPARERS

9.1 City of Moreno Valley

Barry Foster, Previous Community & Economic Development Director
John Terell, Previous Planning Official Community and Economic Development Director
Richard Sandzimier, Acting Community Development Director
Mark Gross, Senior Planner
Ahmad Ansari, P.E., Public Works Director/City Engineer (Prior)
Mark Sambito, Land Development Division Manager (Prior)
John Kerenyi, P.E., Senior Traffic Engineer
Michael Lloyd, P.E., Land Development Manager
Clement Jimenez, P.E., Senior Engineer
Eric Lewis, P.E., T.E., Transportation Engineering Division Manager/City Traffic Engineer
Randy Metz, Fire Marshal (Prior)
Candace Cassel, Special Districts Division Manager
Jeannette Olko, Electric Utility Division Manager
Jennifer Terry, Management Analyst
Tony Hetherman, Parks Projects Coordinator
Timothy Krantz, Ph.D., City CEQA Reviewer
Sharon Sharp, Senior Management Analyst
Richard Teichert, Chief Financial Officer (Prior)
Marshall Eyerman, CFO
Marge Lazarus, Senior Engineer Public Works Department/Capital Projects Division
Adria Reinertson, Fire Marshal
Michael Wolf, Public Works Director, City Engineer

9.2.1 LSA Associates, Inc.

9.2.1.1 Environmental Impact Report

Lynn Calvert-Hayes, AICP, Principal in Charge
Kent Norton, AICP, REA, Associate/Senior Project Manager
Ray Hussey, AICP, Associate
Meghan Macias, T.E., Principal/Traffic Section Manager
Ron Brugger, Senior Air Quality Specialist
Kelly Czechowski, Senior Environmental Planner
David Atwater, Senior Environmental Planner
Katheryn Best, Environmental Planner

9.2.2 ESA

9.2.1.1 Environmental Impact Report

Eric J. Ruby, Senior Vice President
Heidi Rous, Director
Michael Houlihan, Principal Associate
Kristin Blackwell, Senior Managing Associate
Daryl Koutnik, Senior Managing Associate
Olivia Chan, Managing Associate
Brian Allee, Managing Associate
Jessie Lee, GIS

9.3 Michael Brandman Associates

8.3.1 Biological Resources

Thomas Holm, Vice President for Environmental Services
Jason Brandman, Vice President
Ken Lord, Ph. D., Director of Natural and Cultural Resources
Scott Crawford, Section Manager

9.3.2 Air Quality

Vince Mirabella, Dispersion Modeling and Health Risk Specialist
Cori Wilson, Air Quality and Greenhouse Gas Specialist

9.3.3 Cultural and Paleontological Resources

Michael Dice, M.A., Cultural Assessment
Ken Lord, Ph.D., Director of Natural and Cultural Resources

9.4 Parsons Brinckerhoff, Inc. / WSP

9.4.1 Traffic Impact Analysis

Jim Imbiorski, Principal in Charge
Ronald Sklepko, P.E., Senior Project Manager
Donald Hubbard, P.E., Traffic Engineer

9.4.2 Local Agricultural Resources

Ron Sklepko, P.E., Senior Project Manager
Debra Meier, AICP, Environmental Project Manager
Stephanie Oslick, MS, AICP, Task Manager
Julie Leung, Environmental Planner
Jessica C. Wilkinson, AICP, Senior Planner

9.4.3 Dry Utilities

Ron Sklepko, P.E., Senior Project Manager

9.5 CH2MHILL

9.5.1 Hydrology and Drainage Studies

Kathleen Higgins, P.E., Client Services Manager
Wilfred Hsu, P.E., Project Manager

9.6 Leighton and Associates

9.6.1 Geotechnical Constraints

Robert Riha, Senior Principal Geologist

9.7 Eastern Municipal Water District

8.7.1 Water Supply Assessment

Elizabeth Lovsted, P.E., Senior Civil Engineer

9.8 Mestre Greve Associates

8.8.1 Noise

Fred Greve, P.E., Principal
Matthew Jones, P.E., Environmental Services Manager

9.9 RBF Consulting, Inc.

9.9.1 Mapping

Patrick Revere, Project Manager

9.10 Andrew Chang & Company, LLC

9.10.1 Regional Agricultural Resources

Andrew Chang, Managing Director

9.11 First American Title Company

9.11.1 Title Reporting Data

Jim Sardo, National Account Manager

9.12 David Taussig & Associates

9.12.1 Fiscal Impact Assessment

David Taussig, AICP, President and CEO
Nathan Perez, Esq., Managing Senior Associate
Kuda Wekwete, Manager

9.13 LPA Architects

9.12.1 Landscaping/Visual Simulations/Specific Plan

James Wirick, AIA, Principal LEED AP BD+C
Joe Yee, FASLA, Principal
Gus Puertas, Landscape Architect Certified Arborist
Danielle Cleveland, Project Designer
Jack Li, Technical Designer

9.14 Highland Fairview Operating Company

8.14.1 Project Design Team

Iddo Benzeevi, President & CEO
Wayne Peterson, Vice President Community Development
Brian Hixson, P.E., Vice President Land Development
Thomas Jelenić, Vice President of Planning and Program Management
Patrick Revere, Director of Land Development
Amy Derrett, Associate Engineer

9.15 LOR Geotechnical

Kevin Osmun, P.E., REA II

9.16 Matrix Consulting

Richard Brady, President

9.17 Firesafe Planning Solutions

David Oatis, Owner
Gene Begnell, Fire Protection Consultant

9.18 Perry and Associates Collaborative

Robert C. Perry, FASLA, Principal

9.19 Utilities Specialist

Jeff Hamen, President

9.20 Cushman & Wakefield

Matt Marschall, Executive Managing Director

9.21 Cox Castle

Ken Bley, Partner

9.22 CBRE

Thomas R. Jirovsky, Senior Managing Director

9.23 WSP

Donald Hubbard, AICP, Senior Planning Manager

9.24 Woodard Curran

Kathleen Higgins. P.E., Senior Client Manager

9.25 Pika Environmental

Dr. Peggy Lobnitz,President