VOLUME 1

DRAFT ENVIRONMENTAL IMPACT REPORT

WESTGATE SPECIFIC PLAN

CITY OF FONTANA, CALIFORNIA

PCR

JANUARY 2015

VOLUME 1

DRAFT ENVIRONMENTAL IMPACT REPORT

WESTGATE SPECIFIC PLAN

CITY OF FONTANA, CALIFORNIA

Prepared For:

City of Fontana
Development Services Organization – Planning Division
8353 Sierra Avenue
Fontana, California 92335

Prepared By:

PCR Services Corporation
2121 Alton Parkway, Suite 100
Irvine, California 92606

JANUARY 2015

Table of Contents

Page

VOLUME 1

EXECUTIVE SUMMARY **ES-1**

1.0 INTRODUCTION **1-1**

2.0 PROJECT DESCRIPTION **2-1**

3.0 BASIS FOR CUMULATIVE ANALYSIS **3-1**

4.0 ENVIRONMENTAL IMPACT ANALYSIS **4.A-1**

A. Aesthetics/Visual Resources 4.A-1
B. Agriculture and Forestry Resources 4.B-1
C. Air Quality 4.C-1
D. Biological Resources 4.D-1
E. Cultural Resources 4.E-1
F. Geology and Soils 4.F-1
G. Greenhouse Gas Emissions 4.F-1
H. Hazards and Hazardous Materials 4.H-1
I. Hydrology and Water Quality 4.I-1
J. Land Use 4.J-1
K. Noise 4.K-1
L. Population and Housing 4.L-1
M. Public Services 4.M-1
N. Transportation/Traffic 4.N-1
O. Utilities and Service Systems 4.O.1-1
1. Water Supply 4.O.1-1
2. Wastewater 4.O.2-1
3. Solid Waste 4.O.3-1

5.0 ALTERNATIVES **5-1**

A. Alternative 1: No Project/No Build Alternative 5-13
B. Alternative 2: No Project/Existing Specific Plan Alternative 5-19
C. Alternative 3: Historic Preservation Alternative 5-27
D. Environmentally Superior Alternative 5-37

6.0 OTHER MANDATORY CEQA CONSIDERATIONS **6-1**

7.0 REFERENCES **7-1**

8.0 LIST OF PREPARERS **8-1**

Table of Contents (Continued)

VOLUME 2

APPENDICES

Appendix A – Initial Study/Notice of Preparation/NOP Comment Letters
Appendix B – Air Quality Technical Appendix
Appendix C – Biological Resources Assessment
Appendix D – Cultural Resources Assessment
Appendix E – Preliminary Geotechnical Evaluation
Appendix F – Greenhouse Gas Emissions Inventory and Reduction Plan/GHG Technical Appendix
Appendix G – Hazardous Materials Assessment
Appendix H – Hydrology and Water Quality Technical Report

VOLUME 3

Appendix I – Noise Technical Appendix
Appendix J – Traffic Impact Analysis (through J2(B)

VOLUME 4

Appendix J – Traffic Impact Analysis (J2(B) through J2(D)

VOLUME 5

Appendix J – Traffic Impact Analysis (from J2(D) to end)
Appendix K – Water Supply Assessments
Appendix L – Westgate Specific Plan Infrastructure Study
Appendix M – Land Evaluation and Site Assessment Model

List of Figures

Page

2-1 Regional Map 2-3
2-2 Project Vicinity Map 2-4
2-3 Existing Specific Plans and Community Plans 2-5
2-4 Existing Land Use Designations 2-6
2-5 Existing Site Conditions 2-7
2-6 Existing vs. Proposed Specific Plan 2-11
2-7 Proposed Land Use Plan 2-12
2-8 Proposed Villages Map 2-13
2-9 Falcon Ridge Village Land Use Plan 2-19
2-10 Westgate Center Land Use Plan 2-20
2-11 Westgate Village Land Use Plan 2-23
2-12 Westgate Village East Land Use Plan 2-27
2-13 Open Space, Parks, and Schools Plan 2-31
2-14 Public and Private Parks 2-32
2-15 Bikeways and Trails Plan 2-33
2-16 Circulation Plan 2-37
2-17a Landscape Master Plan (South) 2-41

List of Figures (Continued)

Page

2-17b	Landscape Master Plan (North)	2-42
2-18	Phase 1 Development Plan	2-45
3-1	Related Projects Map	3-3
4.A-1	Photograph Location Map	4.A-3
4.A-2	Views to the North	4.A-4
4.A-3	Views to the East	4.A-5
4.A-4	Views to the South	4.A-6
4.A-5	Views to the West	4.A-7
4.B-1	Agricultural Land in the Project Area	4.B-5
4.C-1	Project Vicinity Map	4.C-3
4.C-2	Total Cancer Risk for Project Vicinity	4.C-19
4.C-3	Closest Sensitive Receptor Locations	4.C-25
4.D-1	Relationship to the Interim MSHCP	4.D-3
4.D-2	Critical Habitat	4.D-4
4.D-3	Plant Communities	4.D-5
4.D-4	Jurisdictional Features	4.D-15
4.D-5	Impacts to Critical Habitat	4.D-37
4.D-6	Impacts to Plant Communities	4.D-38
4.D-7	Impacts to Jurisdictional Features	4.D-39
4.I-1	Existing and Proposed Hydrology	4.I-3
4.I-2	Flood Insurance Rate Map	4.I-7
4.I-3	Storm Drain Master Plan	4.I-21
4.I-4	Water Quality Management Plan	4.I-22
4.K-1	Project Site and Noise Measurement Locations	4.K-7
4.N-1	Location of Study Area Intersections	4.N-3
4.O.1-1	Water Master Plan	4.O.1-27
4.O.1-2	Recycled Water Master Plan	4.O.1-28
4.O.2-1	Sewer Master Plan	4.O.2-7

List of Tables

Page

ES-1	Planning Area Land Use Summary	ES-3
ES-2	Development Summary for Proposed Commercial Uses	ES-4
ES-3	Phase 1 Development Summary	ES-7
ES-4	Summary of Project Impacts and Mitigation Measures	ES-12
2-1	Planning Area Land Use Summary	2-15
2-2	Development Summary for Proposed Commercial Uses	2-16
2-3	Falcon Ridge Village Summary	2-18
2-4	Westgate Center Summary	2-21
2-5	Westgate Village Summary	2-25
2-6	Westgate Village East Summary	2-29
2-7	Phase 1 Development Summary	2-43

List of Tables (Continued)

Page

3-1 Related Projects List....3-2
3-2 Cumulative Development Summary....3-5
4.A-1 General Plan Consistency Analysis....4.A-21
4.B-1 San Bernardino County Agricultural Land Summary....4.B-2
4.B-2 LESA Significance Ratings....4.B-9
4.C-1 Ambient Air Quality Standards....4.C-9
4.C-2 South Coast Air Basin Attainment Status (San Bernardino County)....4.C-11
4.C-3 Pollutant Standards and Ambient Air Quality Data....4.C-21
4.C-4 General Plan Consistency Analysis....4.C-41
4.C-5 Unmitigated Proposed Westgate Specific Plan - Estimate of Phase I Construction Emissions (pounds per day)....4.C-45
4.C-6 Unmitigated Westgate Specific Plan Operational Emissions – Phase I and Buildout(Pounds per Day)....4.C-48
4.C-7 Phase I Development – Localized Impacts of Planning Areas Less Than 5 Acres....4.C-52
4.C-8 Summary of Maximum Modeled DPM Concentrations and Cancer Risk....4.C-58
4.C-9 Summary of Maximum Modeled Annual DPM Concentrations and Noncancer Chronic Health Impacts....4.C-59
4.C-10 Summary of Maximum Noncancer Acute (1-Hour) Health Impacts....4.C-59
4.C-11 Summary of Maximum Noncancer Acute (8-Hour) Health Impacts....4.C-59
4.C-12 Unmitigated Westgate Specific Plan - Cancer Risk Calculations....4.C-62
4.C-13 Unmitigated Westgate Specific Plan - Non-Cancer Chronic and Acute Calculations....4.C-63
4.C-14 Mitigated Proposed Westgate Specific Plan - Estimate of Phase 1 Construction Emissions (pounds per day)....4.C-71
4.C-15 Mitigated Proposed Westgate Specific Plan - Cancer Risk Calculations....4.C-72
4.D-1 Plant Communities....4.D-2
4.D-2 Jurisdictional Features....4.D-17
4.D-3 General Plan Consistency Analysis....4.D-42
4.E-1 General Plan Consistency Analysis....4.E-23
4.F-1 Principal Regional Active Faults....4.F-3
4.F-2 General Plan Consistency Analysis....4.F-11
4.G-1 State of California GHG Emissions....4.G-3
4.G-2 Unmitigated Proposed Westgate Specific Plan Annual Greenhouse Gas Emissions....4.G-23
4.G-3 Mitigated Proposed Westgate Specific Plan Annual GHG Emissions....4.G-28
4.H-1 General Plan Consistency Analysis....4.H-18
4.I-1 Existing Site Hydrology....4.I-5
4.I-2 Water Quality Objectives for Santa Ana River Reach 3....4.I-6
4.I-3 Water Quality Objectives for Chino Groundwater Management Zones....4.I-11
4.I-4 Low Impact Development (LID) BMP Options....4.I-24
4.I-5 Summary of Proposed Hydrologic Conditions....4.I-33
4.I-6 Anticipated and Potential Pollutants Generated by Land Use Type....4.I-39
4.I-7 General Plan Consistency Analysis....4.I-42
4.J-1 SCAG RTP/SCS/Westgate Specific Plan Consistency....4.J-8
4.J-2 SCAG Compass Blueprint/Westgate Specific Plan Consistency....4.J-11
4.J-3 Fontana General Plan Land Use Element/Westgate Specific Plan Consistency....4.J-14
4.K-1 Noise and Land Use Compatibility Matrix....4.K-4
4.K-2 Noise Standards....4.K-5
4.K-3 Guideline Vibration Annoyance Potential Threshold Criteria....4.K-6
4.K-4 Guideline Vibration Damage Potential Threshold Criteria....4.K-6

List of Tables (Continued)

Page

4.K-5	Summary of Ambient Noise Measurements	4.K-12
4.K-6	Traffic Noise Model Calibration Results	4.K-13
4.K-7	Vehicle Mix for Traffic Noise Model	4.K-14
4.K-8	Predicted Existing Vehicular Traffic Noise Levels	4.K-15
4.K-9	Off-Site Traffic Noise Analysis, Existing with Project	4.K-19
4.K-10	Off-Site Traffic Noise Analysis, Future with Project	4.K-21
4.K-11	Typical Vibration Velocities for Potential Project Construction Equipment	4.K-26
4.K-12	Maximum Noise Levels and Estimated Usage of Typical Construction Equipment	4.K-29
4.K-13	Estimate of Construction Noise Levels at Off-Site Sensitive Receiver Locations	4.K-30
4.K-14	General Plan Consistency Analysis	4.K-31
4.L-1	Population, Housing, and Employment Summary	4.L-2
4.L-2	Population, Housing, and Employment Projections	4.L-3
4.L-3	Job/Housing Ratio Projections	4.L-3
4.L-4	Proposed Project Population, Household, and Employment Impacts Between the Years of 2008 and 2035	4.L-8
4.L-5	General Plan Consistency Analysis	4.L-11
4.L-6	Cumulative Population, Housing, and Employment Generation	4.L-12
4.M-1	General Plan Consistency Analysis	4.M-20
4.N-1	General Plan Consistency Analysis	4.N-31
4.N-2	Traffic Signal Warrant Summary	4.N-39
4.N-3	Summary of Intersection Improvements	4.N-42
4.O.1-1	Historical Annual Water Supply Production by Fontana Water Company (AFY)	4.O.1-2
4.O.1-2	Historical Chino Basin Production by Pool (AF)	4.O.1-4
4.O.1-3	Summary of Current and Planned Water Supplies	4.O.1-18
4.O.1-4	Water Supply and Demand Comparison for Normal Hydrologic Condition	4.O.1-20
4.O.1-5	Water Supply and Demand Comparison for Single-Year Condition (2004)	4.O.1-20
4.O.1-6	Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition	4.O.1-21
4.O.1-7	Proposed Project Water Demand Estimates for Fontana Water Company	4.O.1-31
4.O.1-8	Fontana Water Company's Future Water Demands With Proposed Project In Normal Years	4.O.1-32
4.O.1-9	Fontana Water Company's Future Water Supplies in Normal Years (AFY)	4.O.1-32
4.O.1-10	Comparison of Fontana Water Company 2015 Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)	4.O.1-33
4.O.1-11	Fontana Water Company's Comparison of Twenty Year Projection (2035) Of Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)	4.O.1-34
4.O.1-12	CVWD Projected Water Demands 2015-2035	4.O.1-35
4.O.1-13	Projected Water Demands 2015-2035 with Westgate Village	4.O.1-35
4.O.1-14	Water Supply and Demand Comparison for Normal Hydrologic Condition with Westgate Village	4.O.1-36
4.O.1-15	Water Supply and Demand Comparison for Single-Year Condition (2004) - Westgate Village	4.O.1-36
4.O.1-16	Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition with Westgate Village	4.O.1-36
4.O.1-17	General Plan Consistency Analysis	4.O.1-38
4.O.1-18	Estimated Cumulative Water Demand	4.O.1-40
4.O.2-1	Project General Plan Consistency	4.O.2-11
4.O.2-2	Cumulative Wastewater Generation	4.O.2-14
4.O.3-1	Existing and Proposed Solid Waste Generation for the Proposed Project	4.O.3-8

List of Tables (Continued)

Page

4.0.3-2 General Plan Consistency Analysis 4.0.3-9
4.0.3-3 Cumulative Solid Waste Generation 4.0.3-11
5-1 Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project 5-5
5-2 Comparison of Alternatives' Ability to Meet Project Objectives 5-38

EXECUTIVE SUMMARY

A. INTRODUCTION

In accordance with CEQA Guidelines § 15123, this Chapter of the EIR provides a brief description of the proposed project; identification of significant effects associated with the proposed project and proposed mitigation measures or alternatives that will reduce or avoid those effects; areas of controversy known to the lead agency; and issues to be resolved including the choice among alternatives and whether and how to mitigate the significant effects.

B. PROJECT LOCATION

The Westgate Specific Plan encompasses 964 acres in the northwestern part of the City of Fontana within a gently sloping alluvial plain of the nearby San Gabriel Mountains in western San Bernardino County. Regionally, this project site is approximately five miles north and west of downtown Fontana, ten miles west of Downtown San Bernardino, 22 miles north of the City of Riverside, and 50 miles east of the City of Los Angeles. The project site is situated adjacent to Interstate 15 (I-15) and State Route 210 (SR-210). Full freeway interchanges that provide access to the site are located at I-15/Baseline, I-15/Summit Avenue with direct access at the SR-210/Cherry Avenue interchange. A utility corridor including Southern California Edison (SCE), Southern California Gas (SCG) and Metropolitan Water District (MWD) facilities traverses the property, paralleling the I-15 freeway.

C. PROPOSED PROJECT

1. Project Background

The Westgate Specific Plan was adopted in 1996 by the City of Fontana. Since that time, the Inland Empire region has experienced substantial growth and the dynamics of the area have changed considerably. The SR-210/I-15 freeway overpass has been completed, with the SR-210 freeway extending easterly to the Interstate 215 (I-215) freeway. Two major development projects have also been completed within the Specific Plan boundary, including the Falcon Ridge Town Center, with 415,000 square feet of retail uses that include shops, services, and restaurants, and the Caltrans 124,000-square-foot Transportation Management Facility and Southern Regional Lab.

The proposed Specific Plan would result in the following changes to the allowable development within the Specific Plan boundaries: an increase of up to 4,072 residential dwelling units; a decrease of 6.4 acres of commercial uses; an increase of approximately 52 acres of parks/open space; an increase of 74 acres of public school uses; and an increase of approximately 8.5 acres of road right-of-way. The proposed Specific Plan would also slightly modify the overall Plan boundaries resulting in a net increase of five acres. This is due to the addition of three parcels comprising a triangular area at the northernmost end of the project area (Planning Areas 1, 2, and 3 in the proposed Specific Plan), the addition of one semi-circular parcel west of and adjacent to Cherry Avenue at the I-15/SR-210 interchange (Planning Area 23 in the proposed Specific Plan), and the removal of a 9.6-acre triangular piece of land located immediately east of and adjacent to San

Sevaine Road and immediately northwest of and adjacent to the existing utility corridor (Planning area 8 in the adopted Westgate Specific Plan).

2. Proposed Project Components

The following describes all the components of the proposed Specific Plan, including land uses, parks and recreation areas, circulation, public facilities and community services elements that would provide for the orderly development of the Westgate Specific Plan. The Westgate Specific Plan sets forth a range of land uses that focuses on creating a village-oriented mixed-use development that implements the vision, goals, policies and objectives described in the proposed new Specific Plan. The Plan provides a broad range of uses including residential, school, retail, office, business and open space uses. The retail, business and office park areas would serve to enhance the City's employment base, establish a corporate corridor, augment the city's tax revenue, and provide opportunities for people to work and shop in the same locale. The residential uses provide a range of single family detached, attached, stacked flats and multi-family homes to appeal to a broad cross-section of the market in a pedestrian-friendly village environment.

(1) Land Use Plan & Summary

The community is comprised of four villages. These villages, including their community structure and design, are discussed following the summary presented for each village. All of the land uses within each village are incorporated into 68 development areas, designated as "Planning Areas" (PAs). **Table ES-1**, *Planning Area Land Use Summary*, below, provides the total acres for each land use including total dwelling units planned. It should be noted that the City has requested that the capacity for additional residential density be provided within the Westgate Specific Plan, in order to help the City reach its State-mandated long-term housing requirements. Such additional housing could be provided on up to 20 acres within Planning Area 24 by allowing residential density up to 50 dwelling units per acre as a permitted use, for a total of up to 1,000 additional residential units, which would replace the planned Mixed-Use 1 land uses on that portion of the planning area. While implementation of this development scenario is not considered likely, it is nonetheless evaluated throughout this Draft EIR in order to address the potential effects of the additional housing within the Specific Plan area.

(a) Commercial Land Uses

The Westgate Specific Plan includes 302.4 acres of Mixed-Use and Retail uses.[1] These uses are located principally adjacent to the Route 210 and I-15 Freeway corridors and comprise approximately 31 percent of the 964-acre Specific Plan area. When comparing to the total combined commercial and residential planned development areas, commercial uses total over 48 percent of the Specific Plan.[2] A 39.4-acre community scale shopping center, Falcon Ridge Towne Center, has been constructed and is located within the Specific Plan boundaries along the I-15 corridor on Summit Avenue, with a neighborhood center planned at the northwest corner of Baseline and Cherry Avenue. The anticipated square footage of all proposed office, retail, and industrial uses within the Specific Plan is summarized below in **Table ES-2**, *Development Summary for Proposed Commercial Uses*.

[1] *If high density residential uses are developed on up to 20 acres in Planning Area 24, a total of 282.4 acres of Mixed-Use and Retail uses would be provided within the Specific Plan.*

[2] *If high density residential uses are developed on up to 20 acres in Planning Area 24, commercial uses would total nearly 45% of total combined commercial and residential planned development areas in the Specific Plan.*

Table ES-1

Planning Area Land Use Summary

Land Use Description	Acres	Target Dwelling Units [a]
Mixed-Use 1 (MU-1)	110.2[b]	
Mixed-Use 2 (MU-2)	71.6	
Mixed-Use 3 (MU-3)	69.7	
Commercial Retail (C)	50.9	
Residential-1 (R-1)	38.4	148
Residential-2 (R-2)	81.6	732
Residential-3a (R-3a)	132.5	2,029
Residential-3b (R-3b)	47.2	1,001
Residential-4 (R-4)	30.0[c]	1,500[c]
Open Space/Public Park (P1)	47.8	
Open Space/Private Park (P2)	9.15	
Open Space/Landscape (OS/L)	1.4	
Open Space/Utility Corridors (OS/UC)	96.1	
Open Space/Drainage Corridor (OS/DC)	4.1	
High School (HS)	60.0	
Elementary Schools (ES)	24.0	
Other (Major road rights-of-way)	89.3	
TOTAL ACRES	**964.0**	
MAXIMUM DWELLING UNITS		**5,410[d]**

[a] *Refer to Section 6.5, Definition of Target Dwelling Units, Target Density, Density Range and Density Transfer, in the proposed Specific Plan for discussion of Target Dwelling Units and Transfer of Dwelling Units.*

[b] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total acreage of MU-1 business park uses within the Specific Plan area would be reduced by 20.0 acres to a total of 90.2 acres.*

[c] *If high density residential uses are developed on up to 20 acres in Planning Area 24, R-4 uses within the Specific Plan area would be increased by 20.0 acres to a total of 50.0 acres and 2,500 target dwelling units.*

[d] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total target dwelling units within the Specific Plan area would be increased by 1,000 dwelling units to a total of 6,410 dwelling units.*

Source: Westgate Specific Plan, 2014

(b) Residential Land Uses

Residential land uses are located throughout the community and are designed to establish a village character. The residential uses are interconnected to the entire Westgate Community and surrounding uses through pedestrian walks and both off and on-street bicycle lanes. Approximately 329.7 acres of residential uses are planned with 5,410 total maximum dwelling units.[3]

[3] *If high density residential uses are developed on up to 20 acres in Planning Area 24, a total of349.7 acres of residential uses with 6,410 target dwelling units would be developed within the Specific Plan area.*

Table ES-2

Development Summary for Proposed Commercial Uses[a]

	Retail (0.25 FAR)[b,c]	Office (0.40 FAR)[b,c]	Industrial (0.40 FAR)[b,c]
Falcon Ridge Village	446,000 SF	-	-
Westgate Center	-	1,332,937 SF[d]	148,104 SF[d]
Westgate Village	157,235 SF	779,024 SF	1,355,475 SF
Westgate Village East	-	305,442 SF	133,642 SF
TOTAL	**602,235 SF**	**2,417,403 SF[e]**	**1,637,221 SF[e]**

[a] *Development area is described in square feet (SF)*

[b] *Floor Area Ratio (FAR) is the ratio of building floor area to total lot area.*

[c] *Planning Areas 9 and 42 (partial area) based on actual completed square feet, which includes approximately 415,000 square feet of retail uses within Falcon Ridge Village (i.e., Falcon Ridge Town Center) and approximately 124,000 square feet of industrial uses within Westgate Village (Caltrans Transportation Management Facility and Southern Regional Lab).*

[d] *If high density residential uses are developed on up to 20 acres in Planning Area 24, office and industrial uses would only be developed on the remaining 10.4 acres, which would reduce overall development of these uses within Westgate Center by 313,632 square feet of office space and 34,848 square feet of industrial space for a new total of 163,089 square feet of office uses and 18,121 square feet of industrial uses.*

[e] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total office and industrial development within the Specific Plan would be 2,103,771 square feet and 1,602,373 square feet, respectively.*

Source: Westgate Specific Plan, 2014

(2) Site Access and Circulation

The proposed project's circulation plan was prepared based upon the traffic study prepared for this Specific Plan. It identifies the major transportation corridors and street alignments required within the Specific Plan project area.

The Westgate Specific Plan project area is located adjacent to the I-15 Freeway and SR-210. The I-15 freeway major interstate transportation corridor connects San Diego with Las Vegas. It includes a High Occupancy Vehicle lane and four travel lanes in each direction. It provides excellent regional access to other nearby interstate freeways, including the SR-210, I-215, I-10 and SR-60 freeways. Access to the Westgate Specific Plan from the I-15 occurs at Baseline Avenue and Summit Avenue. The SR-210 Freeway connects from Los Angeles to the west and Redlands to the east. It has a High Occupancy Vehicle lane and four travel lanes in each direction. It also provides excellent regional access to other nearby interstate freeways, including the I-15, I-215, I-10 and I-60 Freeways. The Cherry Avenue/SR-210 interchange provides direct access into the Westgate Specific Plan.

Local streets are not shown on the Circulation Plan and would be provided on a parcel by parcel basis when applications for development occur. The Local Street classification with a 36 feet curb-to-curb section may be restricted to cul-de-sac and short local streets (public or private) as required by the Fire Department.

The Local Street classification of 40 feet wide curb-to-curb shall be used for local collector streets or backbone streets which exceed the above standards. In both cases, both sides of the street feature a

five-foot-wide street-adjacent landscape area and a five-foot-wide sidewalk. When there is a residential rear or side yard condition and/or a community theme wall an additional ten-foot landscape easement, as measured to back of sidewalk, shall be provided. When a residential unit fronts onto a collector street no landscape easement is required.

(3) Landscaping

The proposed Westgate Specific Plan provides extensive landscaping along proposed roadways throughout the Specific Plan area. Additionally, development of the various proposed land uses within each Planning Area would be subject to the landscaping requirements provided in Section 5.0, *Community Design Guidelines*, of the proposed Specific Plan. The design guidelines prescribe the type, amount, and location of landscaping for structures, roadways, access points, and parking lots for all future development occurring within the Specific Plan area.

3. Sustainability Features

The proposed Westgate Specific Plan includes a number of sustainability features that are intended to minimize the development's impacts on the environment. Such features that the applicant has committed to implementing include the following:

SF-1: By providing jobs near housing, with retail, parks and schools within walking distance of compact residential villages, the Westgate Specific Plan residents would have less reliance on the automobile. This in turn would result in reduced vehicular emissions and an overall healthier community.

SF-2: The Westgate Specific Plan would also become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the Westgate Specific Plan would achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CalGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills and install low pollutant-emitting materials. It also requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for non-residential buildings over 10,000 square feet designed to ensure that all are working at their maximum capacity and according to their design efficiencies.

SF-3: In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape irrigation in public parks and rights of ways. The Inland Empire Utilities Agency (IEUA) is in the process of building a regional recycled water system to serve the Westgate Specific Plan and other areas in Fontana.

SF-4: The Westgate Specific Plan infrastructure plans require that a reclaimed water "purple pipe" system be installed in medians for all major streets, parkways and public parks. It would be connected to the IEUA recycled water system upon its completion.

4. Construction Schedule and Phasing

Construction of the project would be phased in an orderly manner, with full buildout of the Specific Plan anticipated to occur by 2035. Each of the four villages may be developed concurrently or in any sequence provided that all infrastructure required to serve each area is provided to the satisfaction of the City engineering department. The timing of each area would be subject to local, regional, and national market conditions. However, the project Applicant has identified the project components to be implemented as part of the first phase of development, which is anticipated to be constructed and operational by 2018. Phase 1 development would include uses proposed within each of the four villages, which are intended to complement existing on- and off-site development and minimize the need for expanded infrastructure facilities in the short-term. A summary of uses to be developed as part of Phase 1 is provided below in **Table ES-3**, *Phase 1 Development Summary*.

5. Necessary Approvals

Approvals required for development of the Westgate Specific Plan Project would include, but may not be limited to, the following:

- Adoption of the new Westgate Specific Plan;
- Amendment to the City of Fontana General Plan to reflect the new Specific Plan (including amending the General Plan Land Use Map and the Circulation Element for proposed roadway classifications);
- Amendment to the City of Fontana Zoning Ordinance;
- Certification of an Environmental Impact Report; and
- Development Agreement.

D. PROJECT OBJECTIVES

The following describes the objectives of the proposed project, which are provided in the proposed Specific Plan as "Specific Plan Goals," and are intended to implement the Plan's Community Planning Vision. The Specific Plan Goals are as follows:

Goal 1: In order to create a vibrant community, incorporate a rich diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses.

Goal 2: Create organizing elements that provide a community identity and opportunity for social interaction.

Goal 3: Develop a plan that generates employment opportunities and improves the city's tax base.

Goal 4: Develop a plan that establishes a corporate corridor.

Goal 5: Create pedestrian friendly connectivity to main activity nodes, including employment, shopping, schools and recreation.

Goal 6: Create a diversity of housing types within a high amenity setting.

Table ES-3

Phase 1 Development Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
COMMERCIAL RETAIL					
68	Commercial Retail	11.5			
BUSINESS PARK					
41	Mixed-Use 2	71.6			
RESIDENTIAL					
2	R-3a	5.2	12.1-18.0	14.0	73
6	R-2	17.4	5.1-12.0	9.0	156
8	R-3a	26.0	12.1-18.0	18.0	468
22	R-1	28.7	0-5.0	3.8	110
36	R-3b	24.2	18.1-24.0	20.5	495
38	R-3a	11.7	12.1-18.0	15.0	175
58	R-2	3.4	5.1-12.0	9.0	30
63	R-2	13.6	5.1-12.0	9.0	122
64	R-3a	9.2	12.1-18.0	15.0	138
Subtotal		***139.4***			***1,767***
PARKS/OPEN SPACE					
1	Open Space/Utility Corridor	2.2			
3	Open Space/Utility Corridor	1.5			
4	Open Space/Public Park	2.9			
5	Open Space/Landscape	1.4			
6a	Open Space/Private Park	0.3			
8a	Open Space/Private Park	1.0			
10	Open Space/Public Park	14.5			
21	Open Space/Utility Corridor	17.2			
35	Open Space/Private Park	0.65			
37	Open Space/Private Park	2.8			
56	Open Space/Utility Corridor	3.8			
57	Open Space/Utility Corridor	20.4			
59	Open Space/Private Park	1.0			
60	Open Space/Public Park	13.1			
61	Open Space/Public Park	2.7			
62	Open Space/Public Park	1.1			
Subtotal		***86.55***			
OTHER					
7	Elementary School	12.0			
TOTAL*		**321.05**			**1,767**

Source: Westgate Specific Plan, 2014

Goal 7: Create a village structure.

Goal 8: Provide quality master planning, architectural and landscape architectural standards.

Goal 9: Develop a compact community to promote a healthy village character, enhance sustainability and conserve resources.

Goal 10: Create a community with a high quality of life.

E. SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Unavoidable significant impacts can occur as a result of project impacts, cumulative impacts, and as a secondary effect from the implementation of a mitigation measure. Based on the analysis contained in Chapter 4, *Environmental Impact Analysis*, the project will result in the following significant and unavoidable environmental impacts:

Agriculture and Forestry Resources: Implementation of the proposed project would accelerate the conversion of agricultural lands and loss of agricultural uses within the City and in the region. The loss of agricultural lands is considered significant on the project site even with implementation of applicable mitigation measures, and also considered cumulatively considerable from a regional perspective. Please refer to Section 4.B, *Agriculture and Forestry Resources*, of this Draft EIR for further discussion of this topic.

Air Quality: Even with the implementation of the recommended mitigation measures during construction activities, the project would, on a temporary basis, exceed the SCAQMD regional significance thresholds for NO_x and PM_{10} during the most intense construction periods. Although these impacts would be short-term in nature, construction-related impacts to air quality would be significant and unavoidable. Similarly, air pollutant emissions associated with increase vehicular traffic during project operations would exceed established thresholds, resulting in significant and unavoidable operational air quality impacts. Further, based on the proximity of sensitive land uses (i.e., residences) to major freeway thoroughfares at some locations on-site, exposure to toxic air contaminants (TACs) would also be considered a significant unavoidable air quality impact. Given these construction-related and operational physical air quality impacts, the proposed project would also result in conflicts with the applicable Air Quality Management Plan, which is also considered a significant unavoidable impact. Please refer to Section 4.C, *Air Quality*, of this Draft EIR for further discussion of this topic.

Cultural Resources: Even with the implementation of the recommended mitigation measures, implementation of the proposed Specific Plan could result in the permanent loss of existing historic resources on the project site. As such, impacts to historic resources would be significant and unavoidable. Please refer to Section 4.E, *Cultural Resources*, of this Draft EIR for further discussion of this topic.

Noise: Even with the implementation of the recommended mitigation measures, long-term operational noise associated with increase vehicular traffic would exceed acceptable noise levels at the nearest noise-sensitive receptors in the project area, and no additional mitigation measures are available to reduce the significance of such impacts. As such, noise impacts associated operation of proposed uses would be significant and unavoidable. Please refer to Section 4.K, *Noise*, of this Draft EIR for further discussion of this topic.

Transportation/Traffic: While traffic-related impacts to local intersections under the proposed Specific Plan would be reduced to less than significant with implementation of applicable mitigation measures, the additional traffic generation associated with development of R-4 residential uses on up to 20.0 acres within Planning Area 24 could result in significant impacts to intersections even with implementation of applicable mitigation measures. As such, it is conservatively concluded that intersection impacts would be significant and unavoidable. Please refer to Section 4.N, *Transportation/Traffic*, of this Draft EIR for further discussion of this topic.

F. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the decision-makers include those areas where an unavoidable significant impact has been projected as well as issue areas where concerns have been raised, primarily through the Notice of Preparation process. For the proposed project, the areas of unavoidable significant impacts are presented above. Issues raised during the NOP comment period, as well as the section of the EIR where each issue is addressed, are as follows:

- Impacts to sensitive species, habitats, and jurisdictional features resulting from future project implementation (refer to Section 4.C, *Biological Resources*, of this Draft EIR);
- Impacts to the local and regional transportation system associated with future development on-site (refer to Section 4.N, *Transportation/Traffic*, of this Draft EIR);
- Capacity of stormwater drainage facilities and water quality effects of project-related stormwater runoff (refer to Section 4.I, *Hydrology and Water Quality*, of this Draft EIR);
- Potential impacts to, or conflicts with, existing infrastructure and utility easements within the Specific Plan boundary (refer to Section 4.J, *Land Use*, and Section 4.O, *Utilities and Service Systems*, of this Draft EIR);
- Construction-related impacts to undiscovered archaeological and Native American cultural resources (refer to Section 4.E, *Cultural Resources*, of this Draft EIR);
- Consistency of the proposed project with applicable local and regional plans, policies, and regulations (refer to Section 4.J, *Land Use*, of this Draft EIR);
- Impacts to public transit services and facilities (refer to Section 4.N, *Transportation/Traffic*, of this Draft EIR); and
- Potential adverse impacts to local and regional air quality and global climate change associated with future project-related air pollutant emissions (refer to Section 4.B, *Air Quality*, and Section 4.G, *Greenhouse Gas Emissions*, of this Draft EIR).

G. ALTERNATIVES

The *CEQA Guidelines* require an EIR to "describe the range of reasonable alternatives to the project, or to the location of the project, which will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The *CEQA Guidelines* direct that selection of alternatives be guided by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.

As described in detail in Chapter 5, *Alternatives*, of this Draft EIR, three alternatives to the project were identified, which include a No Project/Build Alternative, a No Project/Existing Specific Plan Alternative, and the Historic Preservation Alternative. Based on an analysis of these alternatives, an environmentally superior alternative is identified. The three identified alternatives, as well as the identified environmentally superior alternative, are summarized below.

1. No Project/No Build Alternative

The No Project/No Build Alternative (Alternative 1) assumes that no new development would occur within the project site. Thus, the future development of up to 5,410 dwelling units, commercial/retail uses, business parks, schools, and open space and parks on the project site would not occur. Under Alternative 1, with the exception of the existing multi-tenant office building, Falcon Ridge Town Center retail uses, and Caltrans Southern Regional Lab facility, the project site would remain undeveloped and vacant. Environmental effects under this Alternative would be similar to existing site conditions, as described in the existing setting sections of each analysis in Chapter 4 of this Draft EIR.

2. No Project/Existing Specific Plan Alternative

The No Project/Existing Specific Plan Alternative would reduce the overall intensity of the proposed project by implementing the existing adopted Westgate Specific Plan, which covers nearly the same as the proposed project site, but includes much lower residential development intensity, reduced open space, reduced school uses, an a different mix of commercial designations that includes mixed-use and "flex" zones (a flex zone is a transition zone to provide a buffer between less compatible land uses). Specifically, this Alternative would allow for the development of 1,864 single-family dwelling units on 386.5 acres, 474 multi-family dwelling units on 79.0 acres, 40.9 acres of retail/commercial uses, 117.6 acres of business parks, 129.5 acres of mixed-use development, 6.9 acres of "flex" uses, 15.0 acres of public parks, 91.0 acres designated as open space within the existing utility corridor traversing the project site, and 10 acres for an elementary school campus. Business park, mixed-use, and retail uses would generally be located on the western side of the Specific Plan area, which residential and school uses would be concentrated within the eastern portion of the site. The roadway network on-site would consist of extensions of existing roadways across the project site.

3. Historic Preservation Alternative

The Historic Preservation Alternative would develop the project site with a development pattern and footprint nearly identical to the proposed Specific Plan within Falcon Ridge Village, Westgate Village, and Westgate Village East. However, this Alternative would not propose any development within Westgate Center (including Planning Areas 12 through 26 of the proposed Specific Plan) in order to avoid impacts to existing historical resources, including the on-site vineyards, water tank, water system, and farmstead site CA-SBR-7324H). As such, the Historic Preservation Alternative would result in an overall reduction in development intensity within the Specific Plan area, with a reduction of 85.0 acres of Business Park uses (designated Mixed-Use 1), 2,037 residential units (or 87.1 acres of residential uses), and 37.4 acres of open space areas. The development scenario under this Alternative, therefore, would include 3,373 residential units, 166.5 acres of Business Park uses (Mixed-Use 1, 2, and 3 designations), 50.9 acres of commercial retail uses, a 60.0-acre high school, two 12-acre elementary schools (totaling 24.0 acres), and 121.15 acres of open space areas. All other improvements and amenities provided as part of the proposed Specific Plan outside the Westgate Center village area would also be included in this Alternative development scenario.

4. Environmentally Superior Alternative

Section 15126.6(e)(2) of the *CEQA Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The *Guidelines* also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the

remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this Draft EIR, the range of feasible alternatives includes the No Project/No Build Alternative, the No Project/Existing Specific Plan Alternative, and the Historic Preservation Alternative.

A comparative summary of the environmental impacts anticipated under each Alternative with the environmental impacts associated with the proposed project is provided in Table 5-1 in Chapter 5, *Alternatives*, of this Draft EIR. A more detailed description of the potential impacts associated with each alternative is provided in Chapter 5. Pursuant to Section 15126.6(c) of the *CEQA Guidelines*, the analysis below addresses the ability of the Alternatives to "avoid or substantially lessen one or more of the significant effects" of the project.

Of the Alternatives analyzed in the Draft EIR, the No Project/No Build Alternative is considered the overall environmentally superior alternative as it would reduce the vast majority of the project impacts and avoid the project's significant impacts regarding agriculture and forestry resources (farmland conversion), conflicts with the applicable AQMP, short-term construction-related air quality impacts, permanent loss of known historic resources, long-term operational impacts relative to air quality and noise, and traffic-related impacts to intersections. However, as indicated above, this Alternative would not meet any of the project objectives. The extent to which each project Alternative would meet each of the stated objectives of the proposed project is summarized in Table 5-2 in Chapter 5, *Alternatives*, of this Draft EIR.

In accordance with the *CEQA Guidelines* requirement to identify an environmentally superior alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that the Historic Preservation Alternative would be the environmentally superior alternative, relative to the other alternatives. It would eliminate the project's significant impact to historic resources and would also reduce the project's significant air quality, agriculture and forestry resources, and noise impacts to a greater extent than the other alternatives; however, these impacts would remain significant and unavoidable. Further, while this alternative does reduce some project impacts, it would result in greater impacts relative to population and housing; specifically, this Alternative would not provide as many housing units or employment opportunities on-site as would the proposed project. However, since this reduction in on-site housing provision does not necessarily translate to a physical environmental impact, impacts are not considered significant or substantially more severe than under the proposed project.

H. SUMMARY OF ENVIRONMENTAL IMPACTS

This section provides a summary of impacts, mitigation measures, and impacts after implementation of the mitigation measures associated with future development allowable under the proposed Specific Plan. The summary is provided by environmental issue area below in **Table ES-4**, *Summary of Project Impacts and Mitigation Measures*.

Table ES-4

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Aesthetics and Views			
Implementation of the proposed project would not have a substantial adverse effect on a scenic vista. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not create substantial light or glare which would adversely affect day or nighttime views in the area. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Agriculture and Forestry Resources			
The proposed project would convert the existing agricultural land on the project site to non-agricultural uses. This would result in the permanent conversion of 443.5 acres of land that is designated as Unique Farmland, which is considered a significant	Potentially Significant	**Mitigation Measure B-1:** Prior to future project approval, for the on-site land that is mapped as Unique Farmland, the project proponent shall allow agricultural activities to continue or resume on such farmland for a period of time as long as practicable until development of such land pursuant to the project, thereby allowing agricultural use up to and until the land is prepared for development and/or development-related activities pursuant to the project;	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
unavoidable impact on Farmland and agricultural resources.		**Mitigation Measure B-2:** Prior to issuance of a grading or building permit, whichever occurs first, the project proponent shall complete of one or more of the following measures to mitigate the loss of agricultural land before conversion: ▪ For on-site land that is mapped as Unique Farmland, the project proponent shall make displaced topsoil available to less productive agricultural lands in the surrounding region, including on similarly mapped agricultural land within San Bernardino County or within the San Joaquin Valley (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, or Kern County). Such dispersion of displaced topsoil can add productivity and yield to other farmland; ▪ For on-site land that is mapped as Unique Farmland and designated in the project as Open Space/Utility Corridor totaling approximately 43 acres, subject to existing utility easements and restrictions and City trails and setbacks, preserve such land for agricultural uses; and ▪ For on-site land that is not mapped as Unique Farmland or other farmland designation and is designated in the project as Open Space/Utility Corridor totaling approximately 44 acres, subject to existing utility easements and restrictions and City trails and setbacks, dedicate such land for agricultural uses.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Air Quality			
Implementation of the proposed project would conflict with or obstruct implementation of the applicable air quality plan (including, but not limited to, the AQMP, RTP, general plans, etc.) adopted for the purpose of avoiding or mitigating an environmental effect. This impact is considered significant and unavoidable with regard to the AQMP. The proposed project would result in less than significant impacts with respect to the CMP and Fontana General Plan.	Potentially Significant	Refer to Mitigation Measures C-1 through C-17 below.	Significant and Unavoidable
Implementation of the proposed project would potentially violate air quality standards or contribute substantially to an existing or projected air quality violation. Maximum regional construction emissions resulting from construction of Phase I of the Westgate Specific Plan would exceed the SCAQMD daily significance thresholds for PM_{10}, NO_X and VOC resulting in potentially significant short-term impacts. Operational regional emissions resulting from operation of the proposed Westgate Specific Plan	Potentially Significant	**Mitigation Measure C-1**: To minimize potential construction-period VOC impacts, the City shall require future projects to use architectural coatings which meet the SCAQMD "super-compliant" VOC standard of <10 g/L, if readily available from commercial suppliers. **Mitigation Measure C-2**: During project construction, the City shall require internal combustion engines/construction equipment operating on future project sites greater than five acres to meet the following: ▪ At least 50 percent of construction equipment greater than 250 hp, which are on-site for 6 or more consecutive work days, shall meet Tier 3 emissions standards or better and be outfitted with BACT devices (e.g., Level 3 diesel emissions control devices) certified by CARB. ▪ Post-January 1, 2016, in additional to the Tier 3 standards	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
exceed the SCAQMD daily significance thresholds for VOC, NO_X, CO, and PM_{10} at completion of Phase I. Emissions resulting from operation of the Westgate Specific Plan at buildout would also exceed the SCAQMD thresholds for VOC, NO_X, CO, PM_{10} and $PM_{2.5}$. Therefore, impacts related to regional emissions from operation of the proposed project would be significant.		specified above, an additional 20 percent or more of construction equipment greater than 250 hp, which are on-site for 6 or more consecutive work days, shall meet Tier 4 and be outfitted with BACT devices (e.g., Level 3 diesel emissions control devices) certified by CARB. ▪ A copy of each unit's certified tier specification and BACT documentation shall be available for inspection during construction. The contractor(s) shall monitor and record compliance for each project construction phase and document efforts undertaken to increase the use of compliant off-road vehicles, such as but not limited to bid solicitation documents, fleet registration of successful vendor(s), etc. **Mitigation Measure C-3**: Construction contractors supplying heavy duty diesel equipment, greater than 50 hp, will be encouraged to apply for AQMD SOON funds. Information including the AQMD website will be provided to each contractor which uses heavy duty diesel for on-site construction activities. **Mitigation Measure C-4**: All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site. **Mitigation Measure C-5:** All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. **Mitigation Measure C-6:** General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions by implementing the following construction measures: ▪ Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		flow. ▪ Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site. ▪ Reroute construction trucks away from congested streets or sensitive receptor areas. ▪ Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation. ▪ Improve traffic flow by signal synchronization. ▪ Require the use of electricity from power poles rather than temporary diesel of gasoline powered generators. **Mitigation Measure C-7:** The City shall require future projects to comply with the following SCAQMD Applicable Rule 403 (Fugitive Dust) Measures: ▪ Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more). ▪ Water active sites at least three times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving). ▪ All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ Cease grading during periods when winds exceed 25 miles per hour. ▪ Pave construction access roads at least 100 feet onto the site from main road. ▪ Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. ▪ Stockpiled dirt may be covered with a tarp to reduce the need for watering or soil stabilizers. **Mitigation Measure C-8**: The City shall require future projects greater than five acres to conduct individual localized impact analysis using dispersion modeling. If such analysis produces significant impacts, with respect to the SCAQMD air quality standards, future projects must mitigate impacts to the extent possible utilizing approved mitigation measures such as those outlined in Mitigation Measures C-1 through C-7. **Mitigation Measure C-9**: The City shall require future commercial and industrial projects with 250 or more employees to provide incentives for employees to use public transportation such as discounted transit passes, reduced ticket prices, and/or other incentives. **Mitigation Measure C-10:** The City shall require future commercial and industrial projects with 250 or more employees to provide incentives for employees and the public to reduce single-occupancy vehicle trips by implementing ridesharing programs, such as carpools/vanpools, and shall provide bicycling facilities such as secured bicycle parking, and employee lockers and showers. **Mitigation Measure C-11:** The City shall require future commercial and industrial projects with loading docks or	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		delivery trucks to prohibit idling of on- and off-road heavy-duty diesel vehicles for prolonged periods pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes. Such projects shall be required to post signage at all loading docks and/or delivery areas directing drivers to shut down their trucks after five minutes of idle time. Also, project site employers who own and operate truck fleets shall be required to inform their drivers of the anti-idling policy. **Mitigation Measure C-12**: The City shall require future commercial and industrial projects with loading docks or dedicated delivery areas to provide on-site electrical connections for TRUs and require that all electric-capable TRUs utilize the connections when in use on-site. Such projects shall be required to post signage at all loading docks and/or dedicated delivery areas directing electric-capable TRU operators to utilize the connections. **Mitigation Measure C-13:** The City shall require future residential, commercial, and industrial projects promote the expanded use of renewable fuel and low-emission vehicles by including one or both of the following project components: provide preferential parking for ultra-low emission, zero-emission, and alternative-fuel vehicles; and provide electric vehicle charging stations within the development. **Mitigation Measure C-14**: The City shall require future projects to provide linkages and connections to adjacent off-site trails, walkways, and other pedestrian commuting routes. **Mitigation Measure C-15**: The City shall require future projects with industrial uses to conduct individual localized impact analysis using SCAQMD LST assessment (projects less than 5 acres) or dispersion modeling (projects greater than 5	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		acres). If such analysis produces significant impacts, with respect to the SCAQMD air quality standards, future projects must mitigate impacts using approved mitigation measures such as those outlined in Mitigation Measures C-9 through C-14. **Mitigation Measure C-16:** Prior to future project approval, plans demonstrating that residential units are to be located a minimum of 200 feet from the nearest right of way of Interstate 15 or State Route 210 and that the units would be equipped with high-efficiency air filters shall be submitted to the City for review and approval. Residential units located within 500 feet from the closest right of way of Interstate 15 or State Route 210 shall be equipped with high-efficiency air filters with a rating of MERV 8 or better. **Mitigation Measure C-17**: Prior to future project approval, plans shall demonstrate that sensitive uses are to be located a minimum separation distance from light industrial and commercial uses, as recommended in the CARB Air Quality and Land Use Handbook. For future projects that result in sensitive uses within the recommended separation distance, an analysis, such as a project-level health risk assessment, shall demonstrate compliance with the SCAQMD health risk thresholds of significance or are mitigated to the extent feasible.	
Implementation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the region is non-attainment under applicable federal or state ambient air quality standards (including releasing emissions which exceed quantitative	Potentially Significant	Refer to Mitigation Measures C-1 through C-17.	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
thresholds for ozone precursors). As the project would have maximum daily construction emissions that exceed the thresholds for VOC and NO_X, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone and NO_2 and would therefore result in potentially significant impacts. As the project would have maximum daily operational emissions that exceed the thresholds for VOC, NO_X, PM_{10}, and $PM_{2.5}$, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone, NO_2, PM_{10}, and $PM_{2.5}$ and would therefore result in potentially significant impacts.			
Implementation of the proposed project would potentially expose sensitive receptors to substantial pollutant concentrations. On-site construction emissions from future development pursuant to the proposed Specific Plan could potentially cause or contribute to locally significant air quality impacts as they would potentially exceed the SCAQMD localized thresholds for VOC, NO_X and PM_{10}.	Potentially Significant	Refer to Mitigation Measures C-1 through C-17.	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Thus, localized construction impacts of Phase I future projects could potentially exceed the LSTs. On-site operational sources of emissions would be relatively minimal and would be required to comply with SCAQMD rules and permitting requirements as applicable. On-site operational emissions are not expected to exceed the SCAQMD localized thresholds for VOC, NO_X, PM_{10}, and $PM_{2.5}$. Thus, localized operational impacts associated with project implementation would not exceed the LSTs and impacts would be less than significant. The proposed Westgate Specific Plan would not contribute to the formation of CO hotspots and would result in less than significant impacts with respect to CO hotspots. Construction activities would not expose nearby sensitive receptors to substantial or long-term TAC emissions. Therefore, construction would result in a less than significant impact. Operation would not expose off-site sensitive receptors to substantial sources of TAC emissions. Therefore, operation would result in a less than significant impact to off-site			

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
receptors. Operation would potentially locate on-site sensitive receptors in close proximity to freeways (I-15 and I-210), which may expose on-site sensitive receptors to substantial sources of motor vehicle TAC emissions. Therefore, operation would result in a potentially significant impact to on-site receptors.			
Implementation of the proposed Specific Plan would not create objectionable odors affecting a substantial number of people. Future development pursuant to the proposed Specific Plan consists of residential, commercial, educational, and recreational uses and are not expected to be a source of off-site odor complaints. In addition, the project is not located near any sources of odors identified by the SCAQMD handbook. Therefore, implementation of the Westgate Specific Plan would have a less than significant impact.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Biological Resources			
Implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat	Potentially Significant	**Mitigation Measure D-1:** Prior to the issuance of any grading permit for the Westgate Village area or Falcon Ridge Village Area, habitat assessments should be conducted to confirm the presence and extent of suitable habitat for coastal California	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.		gnatcatcher and San Bernardino kangaroo rat (SBKR). Specifically, Riversidean Sage Scrub (RSS) and Riversidean Alluvial Fan Sage Scrub (RAFSS) was mapped in the Westgate Village area during 2012 surveys and may be suitable for coastal California gnatcatcher, and USFWS mapped designated critical habitat for SBKR occurs in the Falcon Ridge Village area. If suitable habitat is present, focused protocol surveys should be conducted. The assessments and focused surveys should be conducted by a biologist(s) possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit (herein referred to as a USFWS permitted biologist) and following the required USFWS survey protocols. If coastal California gnatcatcher and/or SBKR are found to occupy the site, and/or if suitable habitat within SBKR designated critical habitat is proposed for impacts, the measures outlined below shall be incorporated. The project applicant shall also consult with USFWS pursuant to the Federal Endangered Species Act, either through a Section 7 or a Section 10 consultation to ensure that proposed impacts are not likely to jeopardize the continued existence of the listed species or destroy or adversely modify SBKR designated critical habitat. The proposed measures may be refined during the consultation process. Coastal California Gnatcatcher 1. Avoid CAGN occupied habitat to the greatest extent feasible, and preserve avoided habitat and any mitigation areas in perpetuity (see 2. and 3. below). 2. Mitigate for any impacts to CAGN occupied habitat at a minimum 2:1 ratio of habitat restoration or creation either on-site and/or off-site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		an agency approved mitigation bank. Purchase of any mitigation credits should occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat. 3. Provide long-term management of preserved and/or mitigation habitat. 4. Avoid direct mortality of individual CAGN during construction by: a. Removing any vegetation within CAGN occupied habitat outside the breeding season (the breeding season is February 15 to August 31); and b. Monitoring by a qualified biologist during vegetation removal to flush out any non-breeding birds away from the clearing activities. 5. Avoid indirect impacts to CAGN including noise impacts during construction and edge effects post-construction, by implementing measures to buffer and avoid human-wildlife conflicts as appropriate. Proposed measures are as follows: During Construction a. Construction noise shall not exceed 60 dB(A) Leq in	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		avoided occupied coastal California gnatcatcher habitat between February 15 and August 31 unless noise attenuation measures are implemented to reduce noise levels below this level, or the USFWS approves noise levels above this threshold. Noise attenuation measures may include, but are not limited to, establishing construction set-back buffers, equipment noise mufflers, and noise walls, as determined necessary by an acoustic specialist and in consultation with the project biologist. Monitoring by a qualified biologist should also occur during construction to ensure noise levels are maintained below the threshold. Alternatively, construction noise levels above 60 dB(A) Leq may be approved by USFWS if monitoring by a USFWS permitted biologist for this species determines that the construction noise is not impacting the expected breeding behavior of the birds. Post Construction b. Installation of cat-proof fencing at the perimeter of development where it abuts preserved areas. c. Restricting access to preservation areas for conservation activities only. d. Direction of all night lighting within development areas away from the preserved areas. e. Installation of signage to direct human activity away from preserved habitat areas. f. Prohibition of unleashed dogs within preserved habitat areas. g. Implementation of an awareness program to educate	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		tenants and/or residents about the conservation values associated with preserved habitat areas. SBKR 1. Avoid SBKR occupied or suitable habitat within SBKR designated critical habitat to the greatest extent feasible, and preserve avoided habitat and any mitigation areas in perpetuity (see 2. and 3. below). 2. Mitigate for any impacts to SBKR occupied or suitable habitat within SBKR designated critical habitat at a minimum 2:1 ratio of habitat restoration or creation either on-site and/or off-site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits should occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat. 3. Provide long-term management of preserved and/or mitigation habitat. 4. Avoid direct mortality of individual SBKR during construction by: a. Installation of exclusionary fencing at the limits of	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		construction within suitable habitat areas; and b. Live-trapping of SBKR within suitable habitat in construction areas and the relocation of trapped individuals to one or more biologically appropriate receiver sites (defined as suitable habitat that is known to be unoccupied, is below population carrying capacity levels, and/or where scrub vegetation has been restored and colonization by the species has not occurred). Trapping shall be conducted by a USFWS permitted or approved biologist. 5. Avoid indirect impacts to SBKR as a result of edge effects post-construction by implementing measures to buffer and avoid human-wildlife conflicts as appropriate, such as: a. Installation of cat-proof fencing at the perimeter of development where it abuts preserved areas. b. Restricting access to preservation areas for conservation activities only. c. Direction of all night lighting within development areas away from the preserved areas. d. Installation of signage to direct human activity away from preserved habitat areas. e. Prohibition of unleashed dogs within preserved habitat areas. f. Implementation of a homeowner's awareness program to educate residents about the conservation values associated with preserved habitat areas. **Mitigation Measure D-2:** Focused surveys for burrowing owl shall be conducted during the breeding season prior to	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		vegetation clearing or ground disturbing activities by a qualified biologist with experience conducting surveys for this species. Surveys shall be conducted in suitable habitat as determined by the qualified biologist based on a field assessment of site conditions at the time of the survey, including habitats such as the Ruderal and Non-native Grassland plant communities observed during the 2012 survey. The survey methodology shall follow the protocol provided as Appendix D of the Staff Report on Burrowing Owl Mitigation published by Department of Fish and Wildlife (March 7, 2012). Pursuant to this protocol four survey visits are required, including at least one site visit between February 15 and April 15, and a minimum of three survey visits at least three weeks apart between April 15 and July 15 (with at least one visit after June 15). The results of the focused surveys are typically considered valid for one year after completion. If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the 2012 Staff Report on Burrowing Owl Mitigation including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure D-3:** Prior to the issuance of any grading permit in areas determined to support sensitive species or sensitive plant communities (e.g., RSS and RAFSS) to which significant impacts would occur, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared. The HMMP shall offset impacts to the species and/or plant communities, focusing on the creation of equivalent habitats within disturbed habitat areas within the study area and/or off-site. In addition, the HMMP shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. Mitigation for impacts shall be offset by on- or off-site replacement, restoration, or enhancement of each respective sensitive plant species/community within an area dedicated for conservation. Ratios of mitigation to impacts shall occur at no less than 0.5:1 for disturbed, remnant plant populations/communities (e.g. Disturbed RSS and Disturbed RAFSS), and at a minimum 1:1 ratio for less disturbed plant populations/communities (e.g. RSS and RAFSS/Disturbed). Mitigation shall occur in one or more of the following ways, as determined appropriate by a qualified biologist: 1. Transplantation of sensitive plant species (on-site or off-site); 2. Seeding of plant species (on-site or off- site); 3. Planting of container plants (on-site or off- site); 4. Salvage of on-site duff and seed bank and subsequent dispersal (on-site or off- site); and/or 5. Off-site preservation at an established mitigation bank or other area dedicated for conservation.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Mitigation Measure D-4: Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features on Figure 4.D-7, Impacts to Jurisdictional Features, the project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies: 1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S." /"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate as appropriate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank. 2. On- and/or off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate as appropriate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.	
Implementation of the proposed project would not affect federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling,	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
hydrological interruption, or other means. No impact would occur due to absence of wetlands within the proposed project area.			
Implementation of the proposed project would not 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. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure D-5:** Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the project applicant shall demonstrate to the satisfaction of the City of Fontana that either of the following have been or will be accomplished. 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds. 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.	Less Than Significant Impact
Implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands). This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Cultural Resources			
Implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. This impact is considered significant and unavoidable, even with mitigation incorporated.	Potentially Significant	**Mitigation Measure E-1:** If the historic agricultural landscape and any associated contributing features including the vineyards, water tank, water system, and farmstead site CA-SBR-7324H would be affected by a future project component of the Plan that would cause a substantial adverse change in the significance of the historical resource, the applicant shall hire a qualified historic preservation consultant to review the Project for conformance with the Secretary of the Interior's Standards, and the preservation consultant shall provide preservation design consultation to assist the applicant to avoid or reduce potential impacts to historical resources. If potentially significant impacts cannot be avoided, the applicant shall prepare a Historic American Landscapes Survey (HALS) to document the historic agricultural landscape in accordance with the National Parks Service's Requirements for Heritage Documentation Programs. The HALS shall be prepared by a qualified historian or architectural historian and include a discussion of the history of the vineyards and associated structures and infrastructure, historic aerial photographs and written descriptions illustrating the appearance and extent of the vineyards during the historic period, as well as photographs	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		of the remaining landscape and structural features by a Historic American Landscape Survey (HALS)-qualified photographer. Furthermore, the applicant shall preserve a portion of the remaining vineyard within the project boundaries for interpretive purposes, at a size determined appropriate by the City, which shall be located in a publicly accessible area and shall include an interpretive plaque and historic aerial photo or historic map and timeline to educate visitors regarding the past use and significance of the property. If the former farmstead site CA-SBR-7324H would be physically impacted by future ground disturbing activities, the site shall be mitigated through archaeological data recovery by a qualified historical archaeologist prior to commencement of construction activities, as discussed below in Mitigation Measure E-4.	
Implementation of the proposed project would not a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure E-2:** The City shall conduct a Phase I Cultural Resources Assessment of the project to identify any archaeological resources within the area of a proposed project component. The Phase I assessment shall include cultural resources records searches through the San Bernardino Archaeological Information Center (as needed), a Sacred Lands File search through the Native American Heritage Commission and follow-up Native American consultation (as needed), and a comprehensive pedestrian survey of the project site. As part of this assessment, the City shall also determine whether there is enough potential to encounter a buried historic archaeological deposit at the former location of CA-SBR-7324H that would warrant subsurface test excavations to identify its nature and extent. ▪ If resources are identified during the Phase I assessment, then a Phase II assessment shall be required, as described in Mitigation Measure E-2.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ If no resources are identified as part of the assessment, no further analyses or mitigation shall be warranted, unless it can be determined that the project has a high potential to encounter buried archaeological resources. This discussion will be included in a technical report and the Cultural Resources Initial Study or EIR Section. ▪ If it is determined that there is a moderate or high potential to encounter buried archaeological resources, appropriate mitigation shall be developed and implemented. Appropriate mitigation may include, redesign of the proposed project to avoid the sensitive area, in which case no additional mitigation would be required. If avoidance is not possible, appropriate mitigation shall include but not be limited to the following: Archaeological Monitoring During Construction: A qualified archaeologist shall be retained by the City prior to the commencement of the project. The archaeologist shall monitor all ground-disturbing activities and excavations within the project area. The purpose of the monitoring is to inspect sidewalls and spoils piles of exposed excavation trenches and pits for the presence or absence of archaeological resources and to determine whether native soils are present at depth. The frequency of monitoring shall be determined by PCR in coordination with the City and shall be based on the results of the soil conditions and resource yields during construction. Such factors that will determine monitoring frequency include rate of excavation and grading activities, the materials being excavated (fill or native soils), the depth of excavation, and if found, the abundance and type of archaeological resources encountered. In addition, PCR shall recommend appropriate treatment measures (i.e., avoidance, removal, or preservation in	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		place) to reduce or avoid impacts to buried resources, if encountered. If archaeological resources are encountered during implementation of the project, ground-disturbing activities shall temporarily be redirected from the vicinity of the find. The archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment that may include the development and implementation of a testing/data recovery investigation or preservation in place. Upon completion of the monitoring services, the archaeologist shall prepare a final report about the find and the monitoring services to be filed with the City to show satisfactory compliance with the archaeological mitigation measures for a given project. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California Register of Historical Resources. The landowner, in consultation with the City and archaeologist, shall designate repositories to curate any material in the event that resources are recovered during construction. **Mitigation Measure E-3:** If resources are identified during the Phase I assessment, a Phase II Cultural Resources Assessment may be warranted if improvements or development is proposed in the vicinity of such resource, or if an alternate alignment or plan is not selected. The Phase II assessment shall evaluate the resource(s) for listing in the California Register of Historical Resources and to determine whether the resource qualifies as a "unique archaeological resource" pursuant to CEQA. If enough data is obtained from the Phase I assessment to conduct a proper evaluation, a Phase II assessment may not be necessary. Methodologies for evaluating a resource can include, but are not limited to: subsurface archaeological excavations, additional	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		background research, and coordination with interested individuals in the community. The methods and results of a Phase II assessment shall be described in a technical report that will support the Initial Study or EIR Section of the CEQA environmental document. **Mitigation Measure E-4:** If, as a result of the Phase II assessment, resources are determined eligible for listing in the California Register or are considered "unique archaeological resources," potential impacts to the resources shall be analyzed and if impacts are significant, mitigation measures shall be developed and implemented to reduce impacts to the resources to a level that is less than significant. The preferred mitigation of impacts to archaeological resources shall be avoidance and/or preservation in place such as resource "capping" (capping resource with a layer of clean fill soils before building on resource) or incorporating the resource into a park plan or open space. Preservation in place or avoidance would provide the least amount of impacts to the resource and would likely meet the interests of individuals or groups who are concerned with impacts to archaeological resources such as Native American groups (if the resource is a prehistoric or Native American resource). If avoidance and/or preservation in place are not feasible, relocation of the resource shall be considered. If these mitigation options are not feasible and/or do not meet the interests of the City or other interested individuals or groups, then a Phase III archaeological assessment shall be implemented. Phase III assessments typically include additional subsurface archaeological excavations (i.e., data recovery) that serve to recover significant archaeological resources before they are damaged or destroyed by the proposed improvement. Phase III assessments shall be considered and implemented as a last resort if no other mitigation measures are feasible. The	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		aforementioned measures are typically recommended as mitigation measures in the CEQA environmental document and are typically implemented after the CEQA environmental document has been certified and prior to issuance of grading or building permits. After the appropriate and feasible mitigation measure(s) has been selected and implemented, the methodology and results of its implementation shall be described in a technical report that shall be submitted to the City to show satisfactory compliance with the archaeological mitigation measures for a given project. The following mitigation measure applies to all components of the Specific Plan: **Mitigation Measure E-5:** If archaeological resources (including historic and prehistoric resources) are encountered during implementation of the project, ground-disturbing activities should temporarily be redirected from the vicinity of the find. The City shall immediately notify a qualified archaeologist of the find. The archaeologist should coordinate with the City as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. Treatment may include the implementation of an archaeological testing or salvage program. All archaeological resources recovered will be documented on California Department of Parks and Recreation Site Forms to be filed with the CHRIS-SBAIC. The archaeologist shall prepare a final report about the find to be filed with the City and the CHRIS-SBAIC, as required by the California Office of Historic Preservation. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California Register of Historical Resources. The landowner, in consultation with the City and the archaeologist, shall designate	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		repositories to curate any material in the event that resources are recovered during construction. The archaeologist shall also determine the need for archaeological monitoring for any ground-disturbing activities in the area of the find thereafter.	
Implementation of the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure E-6:** If construction excavations will reach depths of five feet or greater, a qualified paleontologist shall attend a pre-grading/excavation meeting and develop a paleontological monitoring program for excavations into older Pleistocene-aged Quaternary Alluvium deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations below five feet or greater into older Pleistocene-aged Quaternary Alluvium deposits. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered. **Mitigation Measure E-7:** If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the San Bernardino County Museum or the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. **Mitigation Measure E-8:** The paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant to the lead agency, the San Bernardino County Museum, the Natural History Museum of Los Angeles County, and other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	
Implementation of the proposed project would not disturb any human remains, including those interred outside of formal cemeteries. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure E-9:** If human remains are encountered unexpectedly during implementation of the proposed project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Geology and Soils			
Implementation of the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	**Mitigation Measure F-1:** To evaluate the potential for direct and secondary effects related to ground shading (including liquefaction, ground settlement, or collapse) to affect the proposed project components, surface reconnaissance and subsurface evaluation shall be performed for each future development. During the detailed design phase of each project, site-specific geotechnical evaluations shall be performed by a qualified geotechnical engineer to assess the settlement potential of the on-site natural soils and undocumented fill. This may include detailed surface reconnaissance to evaluate site conditions, and drilling of exploratory borings or test pits and laboratory testing of soils, where appropriate, to evaluate site conditions. Examples of possible design construction techniques for soils with potential for settlement include removal of the compressible/collapsible soil layers and replacement with compacted fill; surcharging to induce settlement prior to construction of improvements; allowing for a settlement period after or during construction of new fills; thickened concrete for structural members; additional metal reinforcement for structural members; strengthened structural connections; structural shear walls; flexible connections for utility lines; and specialized foundation design including the use of deep foundation systems to support structures. Varieties of in-situ soil improvement techniques are also available, such as dynamic compaction (heavy tamping) or compaction grouting.	Less Than Significant Impact
Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. This impact is considered less than significant	Potentially Significant	Refer to Mitigation Measure F-1.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
with implementation of applicable mitigation measures.			
Implementation of the proposed project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	Refer to Mitigation Measure F-1.	Less Than Significant Impact
Greenhouse Gas Emissions			
Project implementation would result in the increased generation of greenhouse gases; however, implementation of applicable mitigation measures would reduce impacts to less than significant.	Potentially Significant	**Mitigation Measure G-1:** For future projects, the City shall establish a Westgate Specific Plan Area-wide performance standard of 50 percent of all employees within the Specific Plan Area be eligible for participation in an employee commute trip reduction program. To achieve this standard, future projects with employers of 250 or more employees at a single location are required to implement an employee commute trip reduction program as required by the AQMP. Future projects with employers of less than 250 employees at a single location are required to implement an employee commute trip reduction program that meets the 50 percent eligibility performance standard. The City may waive this requirement for businesses that are extremely small, such as local shops with fewer than 10 employees, etc. to the extent that such a waiver would not conflict with achievement of the performance standard (i.e., eligibility rate of 50 percent of all employees within the Specific Plan Area for participation in an employee commute trip reduction program). Employee commute trip reduction programs shall encompass a combination of individual measures which may include, but are not limited to, the	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		following: ▪ Provide ride-sharing programs and designate a certain percentage of parking spaces for ride sharing vehicles with adequate passenger loading and unloading and waiting areas for ride-sharing vehicles that minimize on-site circulation impacts and traffic impacts on adjacent roadways; ▪ Allow telecommuting and alternative work schedules such as staggered start times, flexible schedules, or compressed work weeks; ▪ Provide employer-sponsored vanpools or shuttles for employee commutes, including purchasing or leasing vans for employee use and subsidizing the cost of vanpool program administration; ▪ Provide convenient access to bicycle parking facilities; ▪ Provide information on public or alternative transportation options; ▪ Provide access to employee break rooms with refrigerators and microwaves; and ▪ Require regular performance monitoring and reporting by employers to demonstrate achievement, or absence of conflict with achievement, of the Specific Plan Area-wide performance standard. **Mitigation Measure G-2:** For future projects, the City shall recommend that schools (K-12) located within the Westgate Specific Plan Area implement a multi-strategy school commute trip reduction program that encompasses a combination of individual measures including, but not limited to, the following:	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ Provide a school bus program within each school's service area boundary; ▪ Implement ride-sharing programs for students, faculty, and staff; ▪ Provide priority parking for carpools/vanpools; and ▪ Provide a designated passenger loading and unloading and waiting areas that minimize on-site circulation impacts and traffic impacts on adjacent roadways.	
Project implementation would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of applicable mitigation measures, this impact would be less than significant.	Potentially Significant	Refer to Mitigation Measures G-1 and G-2.	Less Than Significant Impact
Hazards and Hazardous Materials			
Implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	The following mitigation measures are contained in the City of Fontana General Plan EIR (GP EIR) in order to address potential impacts associated with hazardous materials, which are also applicable to the proposed Specific Plan: **Mitigation Measure H-1:** The City shall require that new proposed facilities involved in the production, use, storage, transport or disposal of hazardous materials be located a safe distance from land uses that may be adversely impacted by such activities. Conversely, new sensitive facilities, such as schools, child-care centers, and senior centers, shall not to be located near existing sites that use, store, or generate hazardous	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		materials. [GP EIR Mitigation Measure HM-1] **Mitigation Measure H-2:** The City shall assure the continued response and capability of the SBCFD/Fontana Fire Protection District to handle hazardous materials incidents in the City and along the sections of freeways that extend across the City. [GP EIR Mitigation Measure HM-2] **Mitigation Measure H-3:** The City shall require all businesses that handle hazardous materials above the reportable quantity to submit an inventory of the hazardous materials that they manage to the SBCFD – Hazardous Materials Division in coordination with the Fontana Fire Protection District. [GP EIR Mitigation Measure HM-4] **Mitigation Measure H-4:** The City shall identify roadways along which hazardous materials are routinely transported. If essential facilities, such as schools, hospitals, child care centers or other facilities with special evacuation needs are located along these routes, identify emergency response plans that these facilities can implement in the event of an unauthorized release of hazardous materials in their area. [GP EIR Mitigation Measure HM-5] In addition to General Plan EIR mitigation measures provided above, the following recommendations are provided as mitigation measures to address potential RECs on the project site based, in part, upon the findings and conclusions of the Hazardous Materials Assessment: **Mitigation Measure H-5:** Development of school sites within the project area shall include Phase I Environmental Site Assessment in accordance with ASTM Standard 1527-05 and the DTSC's school site evaluation program.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Mitigation Measure H-6: Due to the potential that concentrations of commercial pesticides likely applied on portions of the Specific Plan area may still be present in on site soils, soil samples shall be collected and analyzed for the presence of organochlorine pesticides and Title 22 Metals. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2008, Interim Guidance for Sampling Agricultural Properties). Soils with elevated organochlorine pesticides or metals compared with these guidelines shall be removed and disposed off site in accordance applicable federal, state, and local regulations. **Mitigation Measure H-7:** Because aerially dispersed lead (ADL) may be present in the soil as a result of historical vehicle emissions during the era of leaded gasoline, an ADL survey shall be conducted within areas of exposed soil which will be disturbed during construction within 50 feet of the Interstate 15 freeway and the Interstate 210 freeway. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Transportation, 2007, Caltrans Aerially Deposited Lead Guidance). Soils with elevated lead shall be removed and disposed off site in accordance applicable federal, state, and local regulations. ADL borings shall be located at no more than 300-foot horizontal intervals along the shoulders and medians where earth will be disturbed. The borings shall be advanced up to 4 feet below ground surface or the maximum anticipated construction depth, whichever is shallower. **Mitigation Measure H-8:** Construction contractors shall develop a soil management plan (SMP) prior to construction activities to address potentially impacted soils that may be uncovered during the construction phase of each future	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		development project. SMPs shall include: potential chemicals of concern, a health and safety plan, identification of individuals responsible for the implementation of the SMP, dust and odor suppression control methods, procedure for notification and identification of unknown environmental features, site specific soil-management protocols, cleanup criteria, and soil reuse options. In accordance with the SMP, such soil generated during construction activities shall be characterized for disposal using new laboratory data representative of the soil being excavated and disposed. **Mitigation Measure H-9:** Piles of dumped materials, including soil, brick and concrete pieces, wood, and other trash and construction debris, were observed on the southeast corner of Westgate Center study area along Sierra Lakes Parkway. Soil piles and construction debris shall be analyzed for volatile organic compounds, total petroleum hydrocarbons, and Title 22 Metals to characterize the disposal of the unknown debris on the study area. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2001, Information Advisory, Clean Imported Fill Material). A minimum of four samples shall be collected and analyzed under an assumed residential/commercial land use. Sample results shall be compared to residential land use regional screening levels specified by the Department of Toxic Substances Control, 2005, Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, or latest available Regional Screening Levels provided by the United States Environmental Protection Agency, Region 9. Soils or debris with elevated concentrations shall be removed and disposed off site in accordance applicable federal, state, and local regulations.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Mitigation Measure H-10: Due to the presence of a former railroad alignment within project boundaries, any construction in which the soil around the railroad is to be disturbed shall be conducted under the purview of the Fontana Fire Protection District to identify proper handling procedures. Once the soil around the railroad has been removed, a visual inspection of the areas beneath and around the removed area shall be performed. Any stained soils observed underneath the area shall be sampled. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2001, Information Advisory, Clean Imported Fill Material). Samples shall be collected and analyzed at one-foot intervals to a depth of four feet at a 300-foot horizontal distance. Samples shall be analyzed for total petroleum hydrocarbons, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and Title 22 Metals, in accordance with appropriate US EPA Methods specified in SW-846. Sample results shall be compared to residential land use regional screening levels specified by Department of Toxic Substances Control, 2005, Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, or latest available Regional Screening Levels provided by the United States Environmental Protection Agency, Region 9. Soils with elevated concentrations shall be removed and disposed off site in accordance applicable federal, state, and local regulations. **Mitigation Measure H-11:** Records available for the Falcon Ridge Cleaners & Shirt Laundry (15218 Summit Avenue) at the SBCFD Hazardous Materials Division shall be reviewed for compliance with this facility's Consolidated Unified Program Agency (CUPA) permit.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	Refer to Mitigation Measures H-1 to H-11.	Less Than Significant Impact
Implementation of the proposed project would not create a significant hazard to the public or the environment due to hazardous materials sites compiled pursuant to Government Code Section 65962.5. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	Refer to Mitigation Measures H-1 to H-11.	Less Than Significant Impact
Implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered less than significant with implementation of applicable mitigation measures.	Potentially Significant	**Mitigation Measure H-12:** Prior to the issuance of grading permits, future developers shall prepare a Traffic Control Plan (TCP) for implementation during the construction phase. The TCP may include, but is not limited to, the following provisions: ▪ At least one unobstructed lane shall be maintained in both directions on surrounding roadways. ▪ At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		▪ If construction activities require the complete closure of a roadway segment, the developer shall provide appropriate signage indicating detours/alternative routes. **Mitigation Measure H-13:** Prior to construction, the City of Fontana Engineering Department shall consult with the City of Fontana Police Department to disclose temporary closures and alternative travel routes, in order to ensure adequate access for emergency vehicles when construction of future projects would result in temporary lane or roadway closures.	
Hydrology and Water Quality			
Implementation of the proposed project would not substantially alter the existing drainage pattern of the site, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not 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. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would not 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, or place within a 100-year flood hazard area structures which would impede or redirect flood flows. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted. This	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
impact is considered less than significant.			
Implementation of the proposed project would not violate any water quality standards or waste discharge requirements. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or in a manner which would result in a substantial erosion or siltation on- or off-site. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Implementation of the proposed project would not otherwise substantially degrade water quality. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Land Use			
Implementation of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
(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. This impact is considered less than significant.			
Noise			
Project implementation could significantly impact adjacent noise sensitive receptors in the project area. Implementation of the prescribed mitigation measures would ensure that potentially significant noise impacts to on-site sensitive uses are reduced to a less than significant level. However, noise impacts on sensitive receptors from off-site traffic noise would be significant and unavoidable.	Potentially Significant	**Mitigation Measure K-1:** Prior to approval of design review permits for sensitive uses, such as residential uses, libraries, daycare facilities, neighborhood parks and playgrounds, planned for areas forecasted to exceed an exterior noise level of 65 CNEL (based on Table 4.K-13 of this Draft EIR), the following shall occur: a) An acoustical analysis shall be performed for residential structures to ensure that interior noise levels due to exterior sources would be at or below 45 CNEL. For these residential use areas, it may be necessary for the windows to be able to remain closed to ensure that interior noise levels meet the interior design standard of 45 CNEL. Consequently the design for these units may need to include mechanical ventilation or air conditioning systems to provide a habitable interior environment with the windows closed based on the results of the interior acoustical analysis. b) To reduce exterior noise levels to 65 CNEL or lower at outdoor sensitive uses (i.e., residential courtyards, parks, and passive recreation areas), a combination of sound barrier walls, earthen berms, and landscaping shall be designed and implemented by a qualified acoustical	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		consultant. Alternatively, outdoor uses shall be located behind buildings (not facing traffic corridors) in a manner that shields outdoor sensitive uses from roadway noise and reduces the exterior noise level to 65 CNEL or below. c) Prior to occupancy of residential uses in Planning Areas 2, 6, and 8, the project applicant shall construct a 20-foot-high sound wall or equivalent physical barrier at the residential property line along the east side of the I-15 Freeway in order to reduce mobile-source noise to acceptable levels. The specific type and design of the physical barrier to be employed at this location shall be determined by the results of the design-specific acoustical analysis noted above. d) Prior to occupancy of proposed residential uses in Planning Areas 24 and 26, the project applicant shall construct a 15-foot-high sound wall or equivalent physical barrier at the residential property line along the north side of the Route 210 Freeway in order to reduce mobile-source noise to acceptable levels. The specific type and design of the physical barrier to be employed at this location shall be determined by the results of the design-specific acoustical analysis noted above.	
Construction and operation of future land uses under the proposed Specific Plan would produce groundborne noise and vibration. However, vibration velocities would not exceed allowable levels at the nearest vibration sensitive uses. Thus, construction-related and	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
operational vibration impacts would be less than significant.			
Project implementation would have a minimal effect on the existing noise environment adjacent to the project area. Thus, long-term noise impacts would be less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Construction activities associated with project implementation would be conducted within the allowable hours specified in the City's Municipal Code. Compliance with the requirements of the City's Municipal Code would ensure that construction noise impacts are less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Population and Housing			
Implementation of the proposed project would not induce substantial population, housing, or employment growth in the project area beyond that anticipated by SCAG projections. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact
Public Services			
Implementation of the proposed project would not result in	Potentially Significant	**Mitigation Measure M-1:** The City shall maintain an average fire response time of 4 to 5 minutes. [GP EIR MM FS-1]	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
substantial adverse physical impacts associated with the provision of new or physically altered government facilities, or the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. This impact is considered less than significant with mitigation incorporated.		**Mitigation Measure M-2:** The City shall continue to maintain an ISO fire rating of Class 3. [GP EIR MM FS-2] **Mitigation Measure M-3:** The City shall ensure that new fire stations are built in areas of new development so that response times are not eroded. [GP EIR MM FS-3]	
Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure M-4:** The City shall continue to work towards a ratio of 1.4 sworn officers per 1,000 residents. [GP EIR MM P-1] **Mitigation Measure M-5:** The Fontana Police Department shall continue to expand its Area Commander Program to more effectively serve specific areas of the City. [GP EIR MM P-2] **Mitigation Measure M-6:** The Fontana Police Department shall expand its Contact Stations to more effectively serve outlying areas. [GP EIR MM P-3] **Mitigation Measure M-7:** The Fontana Police Department shall continue its School Resource Officer Program on all current and future middle school campuses. [GP EIR MM P-4] **Mitigation Measure M-8:** The Fontana Police Department shall continue its extensive volunteer crime prevention programs, including Citizen Volunteers, Explorers, and Citizens on Patrol, Neighborhood Watch, Police Reserves, and Community	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Emergency. [GP EIR MM P-5] **Mitigation Measure M-9:** The Fontana Police Department shall continue its bilingual incentive program to more effectively serve the Latino community. [GP EIR MM P-6] **Mitigation Measure M-10:** The City shall maintain an average police and fire response time of 4 to 5 minutes. [GP EIR MM P-7] **Mitigation Measure M-11:** The City shall continue to promote the establishment of Neighborhood Watch programs in residential neighborhoods, aimed at encouraging neighborhoods to form associations to patrol or watch for any suspicious activity. [GP EIR MM P-8] **Mitigation Measure M-12:** The City shall incorporate appropriate staffing levels in the annual budget process keyed to City growth in population and employment. [GP EIR MM P-9]	
Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. This impact is considered less than significant with mitigation incorporated.	Potentially Significant	**Mitigation Measure M-13:** Planning and development in the City shall continue to be integrated with the needs of school districts for new facilities. [GP EIR MM S-1] **Mitigation Measure M-14:** The City shall continue to support local school districts in their efforts to obtain additional funding sources, including special assessment districts and supplementary state and federal funding. [GP EIR MM S-2] **Mitigation Measure M-15:** The City shall establish and maintain effective joint use agreements with school districts serving the community to achieve optimum, cost effective use of school facilities. [GP EIR MM S-3] **Mitigation Measure M-16:** The City shall continue to withhold building permits until verification that applicable school fees have been collected by the appropriate school district. [GP EIR	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		MM S-4] **Mitigation Measure M-17:** The City shall collaborate with school districts in designing adjacent school/recreation facilities to achieve maximum usability and cost effectiveness for both the City and the school districts. [GP EIR MM S-5] **Mitigation Measure M-18:** The City shall collaborate with school districts in expanding educational opportunities and programs that benefit from City facilities. [GP EIR MM S-6].	
Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives parks and recreational facilities. Further, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and the proposed project does the project include recreational facilities or	Potentially Significant	**Mitigation Measure M-19:** A wide variety of parks and recreation facilities, including regional, community, neighborhood and sub-neighborhood parks, shall be provided throughout the City. [GP EIR MM PR-1] **Mitigation Measure M-20:** The design of all parks shall meet the particular needs of the specialized populations they serve, such as seniors, young adults, families, and children. [GP EIR MM PR-2] **Mitigation Measure M-21:** Barrier-free access to all parks shall be provided. [GP EIR MM PR-3] **Mitigation Measure M-22:** The park standards for the City shall be two-acres per thousand residents for community parks and three-acres per thousand for neighborhood parks. [GP EIR MM PR-4] **Mitigation Measure M-23:** Each park within the City shall provide a variety of activity options for users, including active and passive uses. [GP EIR MM PR-5] **Mitigation Measure M-24:** The City shall reevaluate the design of each of its parks as part of the periodic update of its Parks, Recreation, and Trails Master Plan. [GP EIR MM PR-6]	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. This impact is considered less than significant with mitigation incorporated.		**Mitigation Measure M-25:** Each park within the City shall be evaluated for safety on a periodic basis. [GP EIR MM PR-7]	
Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services. This impact is considered less than significant.	Potentially Significant	**Mitigation Measure M-26:** The City shall continue to coordinate its library services with surrounding school districts. [GP EIR MM LS-2] **Mitigation Measure M-27:** The City shall evaluate methods of expanding library services through staffing strategies, technical advancements and facilities design. [GP EIR MM LS-3]	Less Than Significant Impact
Traffic and Circulation			
Implementation of the proposed project under Existing Plus Project, Phase 1 (Year 2018), and Buildout (Year 2035) conditions would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the	Potentially Significant	The recommended mitigation measures in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements. Although the majority of these proposed improvements would be located within the City of Fontana, some of them are located outside of the City's jurisdiction in the Cities of Rialto and Rancho Cucamonga, in unincorporated San Bernardino County,	Significant and Unavoidable

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
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. With implementation of applicable mitigation measures and/or payment of fair-share contributions to necessary traffic system improvements, this impact is considered less than significant unless high density residential uses are developed within Planning Area 24, in which case impacts under Buildout conditions would be considered significant and unavoidable even with mitigation.		or are State highway facilities under the jurisdiction of Caltrans. While such mitigation measures located outside the City of Fontana's jurisdiction would address project-related and cumulative traffic system impacts, the City of Fontana cannot compel other affected jurisdictions to implement these improvements. However, the project applicant would be required to pay "fair share" contributions to address the proposed project's proportion of traffic impacts at each facility, as summarized in Table 21 of the project's TIA. (1) Intersection Improvements The intersection improvements required to mitigate all project impacts are summarized in Table 4.N 3, *Summary of Intersection Improvements*, of this Draft EIR. (2) On-Site Roadway Segment Improvements On-site roadway segment improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 78 of the project's TIA). Figures 79 and 80 of the project's TIA show the City of Fontana General Plan roadway cross-sections and the Westgate Specific Plan roadway cross-sections, respectively, that are referenced in Figure 78. **Mitigation Measure N-1:** Construct Heritage Circle from Victoria Avenue to Baseline Avenue at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-2:** Construct Cherry Avenue from the I-15 Freeway to Walnut Avenue/Victoria Street at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Cherry Avenue from Walnut Avenue/Victoria Street to Baseline Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-2a:** Within five (5) years from the Certificate of Occupancy of any future warehouse in PA 41, the Developer will, subject to eligible fee credits for the construction of master infrastructure improvements, complete construction of Cherry Avenue from the I-15 Freeway to Walnut Avenue/Victoria Street at its ultimate cross-section width, including the median, landscaping and parkway improvements as well as the completion of construction of Cherry Avenue from Walnut Avenue/Victoria Street to Baseline Avenue at its ultimate half-section section width, including the remaining portion of the median, landscaping and parkway improvements. **Mitigation Measure N-3:** Construct Summit Avenue from San Sevaine Road to Sierra Lakes Parkway at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct Summit Avenue from its western project boundary to Lytle Creek Road at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-4:** Construct San Sevaine Road from Summit Avenue to the northern boundary of Planning Area 21 and from Sierra Lakes Parkway to Walnut Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. Construct San Sevaine Road from the northern boundary of Planning Area 21 to Sierra Lakes Parkway at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Mitigation Measure N-5: Construct Lytle Creek Road from its northern project boundary to Summit Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-6:** Construct Sierra Lakes Parkway from Cherry Avenue to San Sevaine Road at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct Sierra Lakes Parkway from San Sevaine Road to its eastern project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-7:** Construct Highland Avenue from Victoria Street to San Sevaine Road at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-8:** Construct Victoria Avenue from the I-15 Freeway to Cherry Avenue at is ultimate cross-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-9:** Construct Walnut Avenue from Cherry Avenue to San Sevaine Road at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. **Mitigation Measure N-10:** Construct Baseline Avenue from its western project boundary to Cherry Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.	

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		(3) Intersection Improvements **Mitigation Measure N-11:** Necessary intersection improvement recommendations and proposed phasing of each improvement, which are summarized above in Table 4.N-3 shall be implemented as necessary to address potential project-related traffic impacts. As is the case for any roadway design, the City of Fontana shall periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory. The phasing of improvements is summarized in Table 4.N-3. The project shall provide on-site roadways to connect to the existing infrastructure in conjunction with development and consistent with the alignment plan.	
Implementation of the proposed project would not 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 and highways. With implementation of applicable mitigation measures and/or payment of fair-share contributions to necessary traffic system improvements, this impact is considered less than significant with mitigation.	Potentially Significant	Refer to Mitigation Measures N-1 through N-11.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact is considered less than significant.	Potentially Significant	**Mitigation Measure N-12:** Sight distance at the each project access shall be reviewed with respect to the California Department of Transportation/City of Fontana standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. **Mitigation Measure N-13:** On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project.	Less Than Significant Impact
The proposed project would not result in inadequate parking capacity. With implementation of applicable mitigation measures, this impact is considered less than significant.	Potentially Significant	**Mitigation Measure N-14:** Each future development within the Specific Plan boundaries shall provide sufficient parking spaces to meet City of Fontana parking code requirements in order to service on-site parking demand.	Less Than Significant Impact
Utilities and Service Systems			
Implementation of the proposed project would require or result in the construction of new water facilities or the expansion of existing facilities, the construction of which would not cause significant environmental effects. This impact is considered less than significant.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Sufficient water supplies are available to service the project from existing entitlements and resources, and no new or expanded entitlements are needed. This impact is considered less than significant.	Less Than Significant Impact	Although impacts would be less than significant, the following mitigation measures are provided to ensure that impacts related to water supply are minimized: **Mitigation Measure O-1:** The City shall work closely with water supply agencies to assure the continued supply of water. [GP EIR MM W-1] **Mitigation Measure O-2:** The City shall act to conserve water in whatever cost-effective ways are reasonably available. [GP EIR MM W-2] **Mitigation Measure O-3:** The City shall manage urban runoff to minimize water supply contamination. [GP EIR MM W-3] **Mitigation Measure O-4:** The City shall collaborate with water management authorities to devise and implement creative and cost-effective water management strategies. [GP EIR MM W-4] **Mitigation Measure O-5:** The City shall provide educational material to its residents and businesses regarding the critical necessity for careful use of water and management of water systems. [GP EIR MM W-5]	Less Than Significant Impact
Implementation of the proposed project would not (1) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; (2) require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or (3) result in a determination by the	Potentially Significant	**Mitigation Measure O-6:** The City shall maintain its current Master Plan of Sewers as the basis for development of a sewer system to serve the community. [GP EIR MM WW-1] **Mitigation Measure O-7:** The City shall design and operate its local and trunk sewer system in close collaboration with the IEUA. [GP EIR MM WW-2] **Mitigation Measure O-8:** The City shall establish and maintain an aggressive water recycling program. [GP EIR MM WW-3] **Mitigation Measure O-9:** The City shall devote sufficient financial support for wastewater system maintenance so that	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. This impact is considered less than significant with implementation of applicable mitigation measures.		current levels of service, health, and safety are sustained or improved. [GP EIR MM WW-4]	
Project implementation would not exceed the capacity of the landfill serving the project area. This impact is considered less than significant.	Less Than Significant Impact	Although impacts would be less than significant, the following mitigation measures are provided to ensure that impacts related to solid waste are minimized: **Mitigation Measure O-10:** Prior to the issuance of any demolition or construction permit, the Applicant shall provide a copy of the receipt or contract indicating that the construction contractor shall only contract for waste disposal services with a company that recycles demolition and construction-related wastes. The contract specifying recycled waste service shall be presented to the Development Services Department prior to approval of certificate of occupancy. **Mitigation Measure O-11:** In order to facilitate on-site separation and recycling of construction related wastes, the construction contractor shall provide temporary waste separation bins on-site during demolition and construction activities. b. Operation **Mitigation Measure O-12:** The City shall continue to maintain a contractual arrangement that achieves maximum recycling rates at a reasonable price. [GP EIR MM SW-1]	Less Than Significant Impact

Table ES-4 (Continued)

Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Mitigation Measure O-13: Where joint programs offer improvement efficiency or reduced cost, the City shall collaborate with other entities in recycling efforts. [GP EIR MM SW-2] **Mitigation Measure O-14:** The City shall continue to provide services to resident and business citizens that facilitate community cleanup, curbside collections and diversion of oil and other hazardous waste materials. [GP EIR MM SW-3] **Mitigation Measure O-15:** The City should maintain an aggressive public information program to stimulate waste reduction by its resident and business citizens. [GP EIR MM SW-4]	

Source: PCR Services Corporation, 2014

1.0 Introduction

1.0 INTRODUCTION

1. PROJECT BACKGROUND

The original Westgate Specific Plan was adopted in 1996 by the City of Fontana (the "City") and included a total area of 957.9 acres in the northwestern portion of the City. Since that time, the Inland Empire region has experienced substantial growth and the dynamics of the area have changed considerably. The SR-210/I-15 freeway overpass has been completed, with the SR-210 freeway extending easterly to the Interstate 215 (I-215) freeway. Two major development projects have also been completed within the Specific Plan boundary, including the Falcon Ridge Town Center, with 415,000 square feet of retail uses that include shops, services, and restaurants, and the Caltrans 124,000-square-foot Transportation Management Facility and Southern Regional Lab. The proposed Westgate Specific Plan (the "proposed project") is an amendment to the approved 1996 Westgate Specific Plan, which encompasses a total area of 964.0 acres within roughly the same planning area as the original 1996 Specific Plan. The amended Specific Plan will supersede the previously approved Westgate Specific Plan in its entirety.

2. PURPOSE OF THE EIR

The City of Fontana is the Lead Agency under CEQA responsible for preparing the EIR for the proposed Westgate Specific Plan (State Clearinghouse No. 1995052002). This EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), and the *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15000 et seq.). The principal *CEQA Guidelines* sections governing content of this document are Sections 15120 through 15132 (Content of an EIR).

In accordance with Section 15121 of the *CEQA Guidelines*, a primary purpose of this EIR is to provide decision-makers and the public with specific information regarding the environmental effects associated with the project, identify ways to minimize the significant effects and describe reasonable alternatives to the project. Mitigation measures are provided in order to reduce the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed project.

The City, which has the principal responsibility of processing and approving the project, will use and consider information in this EIR, along with other information that may be presented during the CEQA process, during the decision to approve, disapprove, or modify the proposed project. Significant environmental impacts cannot always be mitigated to a level considered less than significant; in those cases, impacts are considered significant and unavoidable. In accordance with Section 15093(b) of the *CEQA Guidelines*, if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed, per Section 15093(b) of the *CEQA Guidelines*, a "statement of overriding considerations."

This document analyzes the environmental effects of the project to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the *CEQA Guidelines*. This analysis considers the actions associated with the project, to determine the short-term and long-term effects associated with

their implementation. This EIR discusses both the direct and indirect impacts of this project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects. CEQA requires the preparation of an objective, full disclosure document to inform agency decision makers and the general public of the direct and indirect environmental effects of the proposed action; provide mitigation measures to reduce or eliminate significant adverse effects; and identify and evaluate reasonable alternatives to the proposed project.

3. APPROACH OF THE EIR

The project is subject to a program EIR because the Westgate Specific Plan constitutes a series of actions that can be characterized as one large project that is related: "…a) geographically; b) as logical parts in a chain of contemplated actions; and c) in connection with the issuance of…plans…to govern the conduct of a continuing program…" (CEQA Guidelines 15168[a]). A program EIR generally establishes a foundation for "tiered" or project-level environmental documents that may be subsequently prepared in accordance with the overall program. According to CEQA Guidelines Section 15168(b), a program EIR can provide the following advantages:

1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;
2. Ensure consideration of cumulative impacts that might be slighted in a project-level analysis;
3. Avoid duplicative reconsideration of basic policy considerations;
4. Allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at the earliest possible time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and
5. Allow a reduction in paperwork.

The Program EIR analyzes, at a general level, a broad range of proposed trails facilities, policies and management actions. In this way, decision-makers and the public can get a sense of the overall physical effects of the whole project. The purpose of the Program EIR is to focus attention to those aspects of a future project (often a long-range plan) that could bring about adverse physical impacts. A Program EIR in this way serves as a foundation for subsequent environmental documentation and/or clearance. CEQA Guidelines Section 15146 indicates that "the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR…."

The Program EIR identifies and analyzes the potential environmental impacts of the program-wide policies and management actions presented in the Westgate Specific Plan, and proposes mitigation measures that would reduce those impacts determined to be significant. With the Program EIR, the City and the public will be able to consider the project in its entirety and the impacts of associated with policies and management actions in the Westgate Specific Plan, some of which might be overlooked if considered on a case-by-case basis. The Program EIR also allows for consideration of broad policy alternatives and their possible environmental effects in a more exhaustive manner than would otherwise be possible. Optimally, this process allows for development of program-wide mitigation measures at a stage when the City has greater flexibility to deal with basic problems or cumulative environmental impacts, and provides an opportunity to

reduce paperwork. Program-level analysis differs from project-level analysis, which benefits from detailed, specific plans of a project (i.e., grading, footprint) and usually applies more directly to actual construction.

Tiering refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan) with later environmental documents on narrower projects, incorporating by reference the general discussions from the broader EIR. Where a Lead Agency is using the tiering process in connection with an EIR for a large-scale planning approval, such as a specific plan, the development of detailed, site-specific information may not be feasible but can be deferred, in many instances, until such time as the Lead Agency prepares a future environmental document in connection with a project of a more limited geographical scale, as long as deferral does not prevent adequate identification of significant effects of the planning approval at hand.[1] The approval of the Westgate Specific Plan itself will not directly result in any specific development project. However, the environmental analysis and mitigation measures provided within Chapter 4.0, *Environmental Impact Analysis*, have been prepared utilizing a programmatic approach under CEQA, intended to provide the opportunity for tiering (per Section 15152 of the CEQA Guidelines) when future development applications are received. As a Program EIR, it should be understood that certain of the impacts identified, and the mitigation measures recommended in this document, are inherently limited in their specificity. As such, subsequent and more focused environmental review may take place based on evaluation of individual project proposals if they have the potential to result in impacts that are not adequately addressed and mitigated in this Program EIR. With subsequent environmental review, this Program EIR will be used to provide the basis for Initial Study determinations of any significant effects, to focus subsequent project review, if required, only on those effects not adequately considered before and to incorporate relevant information and analysis by reference.

In addition, alternatives to the project are presented to evaluate whether there are alternative development scenarios that can further minimize or avoid significant impacts associated with the project.

4. COMPLIANCE WITH CEQA

In compliance with the *CEQA Guidelines*, the City has provided opportunities for the public to participate in the environmental review process. During the preparation of the Draft EIR, an effort was made to contact various federal, State, regional, and local government agencies and other interested parties to solicit comments and inform the public of the proposed project. This included the distribution of an Initial Study and Notice of Preparation (NOP), and the holding of a public scoping meeting.

a. Initial Study

In accordance with Section 15063(a) of the *CEQA Guidelines*, the City undertook the preparation of an Initial Study. The Initial Study determined that a number of environmental issue areas may be impacted by project implementation. As a result, the Initial Study determined that this Draft EIR should address the project's potentially significant impacts on a variety of environmental issue areas.

The EIR focuses primarily on changes in the environment that would result from the proposed project. The EIR identifies potentially significant impacts resulting from the construction and operation of the proposed

[1] *CEQA Guidelines, Section 15152(c), Tiering, 2012.*

project and provides measures to mitigate potential significant impacts. This EIR addresses impacts in the following areas:

- Aesthetics;
- Agriculture and Forestry Resources
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology/Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials
- Hydrology/Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing
- Public Services
- Recreation;
- Transportation/Traffic; and
- Utilities and Service Systems

Based on the Initial Study, issues for which no significant impacts are anticipated to occur are identified in Chapter 6, *Other Environmental Considerations*, of this EIR.

b. Notice of Preparation

Pursuant to the provision of Section 15082 of the *CEQA Guidelines*, the City circulated a NOP to public agencies, special districts, and members of the public for a 30-day period commencing July 12, 2013 and ending August 10, 2013. The purpose of the NOP was to formally convey that the City is preparing a Draft EIR for the project, and to solicit input regarding the scope and content of the environmental information to be included in the EIR. The Initial Study was circulated with the NOP. The NOP, Initial Study, and responses to the NOP are provided in Appendix A, *Initial Study/Notice of Preparation/NOP Comment Letters*.

c. NOP and Scoping Results

The City advertised a notice of public scoping meeting for the project, which was held on Thursday, July 18, 2013 in the Development Services Building at Fontana City Hall, 8353 Sierra Avenue, Fontana, California 92335. The meeting was held with the specific intent of affording interested individuals/groups and public agencies to assist the lead agency in determining the scope and focus of the EIR as described in the NOP and Initial Study.

The NOP/Initial Study was distributed for 30 days to various public agencies and other entities, from July 12 to August 10, 2013, in order to receive input as to the scope and content of the environmental information to be provided in this EIR. Comments were received from OmniTrans, the Cucamonga Valley Water District (CVWD), the California Governor's Office of Planning and Research (OPR), the California Native American Heritage Commission (NAHC), the California Department of Fish and Wildlife (CDFW), the California Department of Transportation (Caltrans), the Southern California Association of Governments (SCAG), the South Coast Air Quality Management District (SCAQMD), and the Metropolitan Water District of Southern California (MWD), as well as one individual, Mr. Erik Milham. The NOP comments are contained in Appendix A and summarized in the Executive Summary under the "Areas of Controversy and Issues to be Resolved" subheading.

d. Draft EIR Public Review

The Draft EIR is subject to a 45-day review period by responsible and trustee agencies and interested parties. In accordance with the provision of Sections 15085(a) and 15087(a)(1) of the *CEQA Guidelines*, the City, serving as the Lead Agency will: 1) distribute a Notice of Availability of a Draft EIR to affected public agencies and other interested parties, which states that the Draft EIR will be available for review at: City of Fontana, Development Services Department, 8353 Sierra Avenue, Fontana, California 92335; and at the Lewis Library located at 8437 Sierra Avenue, Fontana, California 92335; 2) prepare and transmit a Notice of Completion (NOC) to the State Clearinghouse; and 3) send notices to the last known name and address of all organizations and individuals who have previously requested such notice in writing. All comments on the Draft EIR should be addressed to:

DiTanyon Johnson, Associate Planner
City of Fontana
Development Services Organization
8353 Sierra Avenue
Fontana, California 92335
Or via email at: djohnson@fontana.org

Any public agency or members of the public desiring to comment on the Draft EIR must submit their comments in writing to the individual identified on the document's NOC prior to the end of the public review period. Upon the close of the public review period, the Lead Agency will then proceed to evaluate and prepare responses to all relevant written comments received from both citizens and public agencies during the public review period.

The Final EIR will consist of the Draft EIR, and revisions to the Draft EIR and responses to comments addressing concerns raised by responsible agencies or reviewing parties. After the Final EIR is completed and at least 10 days prior to its certification, a copy of the response to comments made by public agencies on the Draft EIR will be provided to the respective agency.

5. FORMAT OF THE EIR

The EIR includes eight sections as well as appendices, which are organized as follows:

Executive Summary. This section presents a summary of the proposed project and alternatives, potential impacts and mitigation measures, and impact conclusions regarding significant unavoidable adverse impacts and effects not found to be significant.

1. **Introduction**. This section provides: background information on the project; describes the purpose of the EIR; approach of the EIR; provides CEQA compliance information relative to the proposed project and the EIR; provides a brief overview of the environmental review process; identifies areas of controversy and issues to be resolved in the EIR; and outlines the organization of the EIR.

2. **Project Description**. Describes the project location, project details and the City's overall objectives for the project.

3. **Basis for Cumulative Analysis**. This section contains a list of related projects anticipated to be built within the project vicinity.

4. **Environmental Impact Analysis**. This section contains the environmental setting, project and cumulative impact analyses, mitigation measures, and conclusions regarding the level of significance after mitigation for each of the following environmental issues: (A) Aesthetics; (B) Agriculture and Forestry Resources; (C) Air Quality; (D) Biological Resources; (E) Cultural Resources; (F) Geology/Soils; (G) Greenhouse Gas Emissions/Global Climate Change; (H) Hazards and Hazardous Materials (I) Hydrology and Water Quality; (J) Land Use/Planning; (K) Noise (L) Population and Housing; (M) Public Services; (N) Transportation/Traffic; and (O) Utilities and Service Systems.

5. **Alternatives**. This section evaluates the environmental effects of the project alternatives, including the No Project Alternative. It also identifies the environmentally superior project Alternative.

6. **Other Mandatory CEQA Considerations**. This section includes a discussion of issues required by CEQA that are not covered in other chapters. This includes unavoidable adverse impacts, impacts found not to be significant, irreversible environmental changes, potential secondary effects caused by the implementation of the mitigation measures for the project, and growth inducing impacts.

7. **Document Preparation and References**. This section lists all of the persons, public agencies, and organizations that were consulted or contributed to the preparation of this EIR, as well as all the references and sources used in the preparation of the document.

This EIR includes the environmental analysis prepared for the project and appendices as follows:

- Appendix A – Initial Study/Notice of Preparation/NOP Comment Letters
- Appendix B – Air Quality Technical Appendix
- Appendix C – Biological Resources Assessment
- Appendix D – Cultural Resources Assessment
- Appendix E – Preliminary Geotechnical Evaluation

- Appendix F – Greenhouse Gas Emissions Inventory and Reduction Plan/GHG Technical Appendix
- Appendix G – Hazardous Materials Assessment
- Appendix H – Hydrology and Water Quality Technical Report
- Appendix I – Noise Technical Appendix
- Appendix J – Traffic Impact Analysis
- Appendix K – Water Supply Assessments
- Appendix L – Westgate Specific Plan Infrastructure Study
- Appendix M – Land Evaluation and Site Assessment Model

6. INCORPORATION BY REFERENCE

In accordance with CEQA Guidelines, Section 15150, this Program EIR incorporates by reference the following documents (available for review at the City of Fontana, Department of Community Development - Planning Division, located at 8353 Sierra Avenue, Fontana, CA 92335).

City of Fontana Development Code (Section 30) – The Development Code of the City of Fontana is that portion of the Municipal Code that prescribes and restricts what landowners can do with their properties and includes standards for the allowed uses of land; building size, shape, and placement; basic architectural and landscape guidelines; and, performance.

City of Fontana General Plan, 2003 – The City of Fontana General Plan is a policy-planning document that provides a long-term outlook for the future of the City. This document is available online at http://www.fontana.org. Information contained within the General Plan has been incorporated herein, as it is the primary source for City policies, objectives, and citywide planning analysis.

City of Fontana General Plan EIR, 2003 – The City of Fontana General Plan EIR summarizes potential environmental impacts associated with implementation of the City of Fontana General Plan, including growth-inducing and cumulative impacts. The proposed project would require an amendment to the City's General Plan for approval, in order to make the General Plan consistent with the land use designations contained in the proposed Specific Plan. However, as assumed under the existing General Plan, nearly all of areas within the proposed Specific Plan boundaries are designated for land uses according to the currently approved Specific Plan, which is similar in terms of land use types to that of the proposed Specific Plan. Thus, a substantial portion of the programmatic analysis and mitigation provided in the General Plan EIR is also generally applicable to the proposed project. In addition, as shown throughout Section 4.L, *Land Use and Planning*, of this Program EIR, the proposed Westgate Specific Plan would be consistent with the goals and policies of the City's General Plan. Accordingly, analysis and mitigation from the General Plan EIR has been incorporated into this Program EIR, where applicable, to maintain consistency with goals and policies for development within the City.

Westgate Specific Plan Final EIR, 1996 – The Westgate Specific Plan EIR, certified in 1996, evaluates potential environmental impacts associated with implementation of the adopted Westgate Specific Plan, including growth-inducing and cumulative impacts, and provides mitigation measures to address potentially significant impacts. The 1996 Specific Plan EIR addresses impacts associated with the following issues: land

use; population and housing; soils, geology and mineral resources; hydrology and water quality; air quality; transportation and circulation; biological resources; energy and natural resources; hazardous materials; noise; public services and utilities; aesthetics; cultural resources; parks, recreation and open space; and construction impacts. Given the similarity in project boundaries between the adopted Specific Plan and the proposed Specific Plan, and associated and associated potential for environmental impacts, the 1996 Specific Plan EIR is incorporated herein by reference.

Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Draft Program EIR, 2011 – The SCAG 2012-2035 RTP/SCS Draft Program EIR analyzes the effects of implementation of SCAG's 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system in the SCAG region. The SCAG region is comprised of six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The SCAG 2012-2035 RTP/SCS Draft Program EIR serves as an informational document to inform decision makers and the public of the potential environmental consequences of approving the proposed RTP/SCS. The document includes an evaluation of a wide range of environmental impacts of the project, and also provides mitigation measures and project alternatives designed to help avoid or minimize significant environmental impacts.

Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Final Program EIR, 2012 – The SCAG 2012-2035 RTP/SCS Final Program EIR analyzes the effects of implementation of SCAG's 2012-2035 RTP/SCS. The 2012-2035 RTP/SCS is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system in the SCAG region. The SCAG region is comprised of six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The SCAG 2012-2035 RTP/SCS Final Program EIR serves as an informational document to inform decision makers and the public of the potential environmental consequences of approving the proposed RTP/SCS. The document includes responses to public comments on the 2012-2035 RTP/SCS Draft Program EIR, corrections and additions to the Draft Program EIR, and a Mitigation Monitoring Program which would be implemented to help avoid or minimize significant environmental impacts.

2.0 Project Description

2.0 PROJECT DESCRIPTION

1. INTRODUCTION

Unitex Management Corporation, the project applicant, proposes to replace the existing Westgate Specific Plan, which was adopted by the City of Fontana in 1996. The new Westgate Specific Plan (the proposed project) is intended to update the existing Specific Plan to reflect current conditions and respond to changing market conditions relative to future development in the project area.

2. PROJECT LOCATION

The Westgate Specific Plan encompasses 964 acres in the northwestern part of the City of Fontana within a gently sloping alluvial plain of the nearby San Gabriel Mountains in western San Bernardino County. Regionally, this project site is approximately five miles north and west of downtown Fontana, ten miles west of Downtown San Bernardino, 22 miles north of the City of Riverside, and 50 miles east of the City of Los Angeles. **Figure 2-1**, *Regional Map*, identifies the Westgate Specific Plan location within the context of the southern California region. The project site is situated adjacent to Interstate 15 (I-15) and State Route 210 (SR-210). Full freeway interchanges that provide access to the site are located at I-15/Baseline, I-15/Summit Avenue with direct access at the SR-210/Cherry Avenue interchange. A utility corridor including Southern California Edison (SCE), Southern California Gas (SCG) and Metropolitan Water District (MWD) facilities traverses the property, paralleling the I-15 freeway. **Figure 2-2**, *Project Vicinity Map*, shows the project area within the local city context.

3. EXISTING ON-SITE AND SURROUNDING LAND USES

The Westgate Specific Plan project area is located in a rapidly growing area of North Fontana. The General Plan identifies areas within North Fontana as "Growth Areas.". There are over a dozen Master Planned Developments in the nearby areas. The North Fontana area contains significant recreational uses, including Fontana Park and the Jessie Turner Health & Fitness Community Center, which includes a new community building and swim complex. A second new community center and swim complex is also located nearby at the Heritage Neighborhood Center directly south of the Westgate Specific Plan. Lighted soccer fields, baseball fields, tennis courts and other amenities area are also located directly south in the McDermott Sports Complex, adjacent to Heritage Intermediate School. **Figure 2-3**, *Existing Specific Plans and Community Plans*, identifies the existing Specific Plans and Community Plans in the Westgate Specific Plan area. Adjacent and surrounding land uses around the project area are summarized as follows:

NORTH: I-15 Freeway – the 103-acre Ventana at Duncan Canyon Specific Plan is approximately ½-mile to the north. Several unimproved vacant properties are located between the Ventana project and the Westgate Specific Plan area.

EAST: Various developed residential single-family neighborhoods.

WEST: I-15 Freeway.

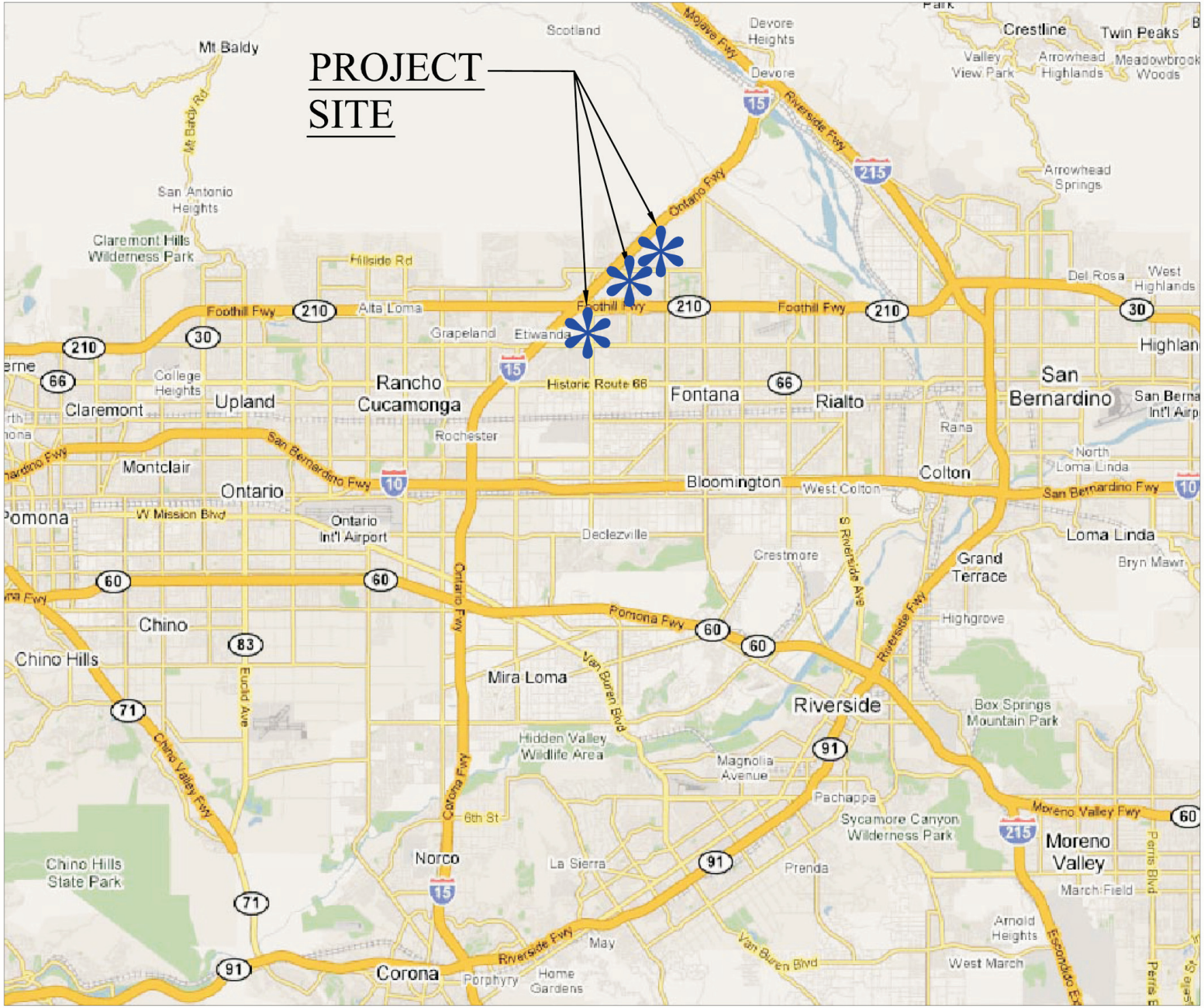
SOUTH: The Village of Heritage planned community is located directly to the south of the Westgate Specific Plan.

4. PROJECT SITE GENERAL PLAN AND ZONING DESIGNATIONS

The project site represents a relatively large area and therefore contains several General Plan land use designations; however, with the exception of two small areas, the entire site is zoned Specific Plan (Specific Plan #17 – Westgate), as the existing Westgate Specific Plan provides site-specific zoning for the various land uses within the Plan area. The two areas within the proposed Specific Plan boundaries that are not located within the boundaries of the adopted Westgate Specific Plan include three parcels comprising a triangular area at the northernmost end of the project area, as well as one semi-circle-shaped parcel immediately west of and adjacent to Cherry Avenue at the I-15/SR-210 interchange. The triangular area is zoned Regional Mixed Use (R-MU), Medium Density Residential (R-2), and Residential Planned Community (R-PC), while the semi-circular parcel is zoned R-MU. General Plan land use designations within the project site include the following: Regional Mixed Use (RMU), Residential Planned Community (R-PC), Medium Density Residential (R-M), General Commercial (C-G), Public Utility Corridors (P-UC), and Recreational Facilities (P-R). Land use designations are illustrated below in **Figure 2-4**, *Existing Land Use Designations*.

5. EXISTING SITE CONDITIONS

The Westgate Specific Plan project area is located on a gently sloping alluvial plain with slopes ranging from 1.5 to 2.5 percent grade. The property contains no significant topographical features, and portions of the site were previously utilized for agricultural purposes. The Falcon Ridge Town Center, with approximately 415,000 square feet of commercial retail uses, has been completed within the Specific Plan boundaries directly north of Summit Avenue. One multi-tenant office building also exists on the project site and is located along Cherry Avenue just north of SR-210. Between Baseline Avenue and the SR-210, the California Department of Transportation (Caltrans) has recently occupied a new 124,000-square-foot Transportation Management Facility and Southern Regional Lab. A SCE utility corridor diagonally traverses the site in a southwesterly direction. Additionally, a MWD main trunk line and right-of-way is located parallel to and along the north side of the SCE corridor, while a SCG main line and right-of-way, as well as a San Gabriel Valley Municipal Water District pipeline, occur on the south side and parallel to the SCE corridor. Further, a San Bernardino Association of Governments (SANBAG) right-of-way occurs contiguous to the southwest boundary of the site. Formerly the location of a railroad line, this corridor is now part of a regional trail system with the capability for a future commuter train line. Along the southerly portion of the site just east of the I-15 freeway, a County of San Bernardino Flood Control District dual box concrete channel collects seasonal storm flows from the Etiwanda and San Sevaine Creeks to the north. An open earthen channel remains just east of the dual concrete channel that formerly collected the storm flows prior to the completion of the dual concrete channels and the Highland channel. Refer to **Figure 2-5**, *Existing Site Conditions*, below, for the location of the above site conditions and other site elements.



PCR

N

Not to scale

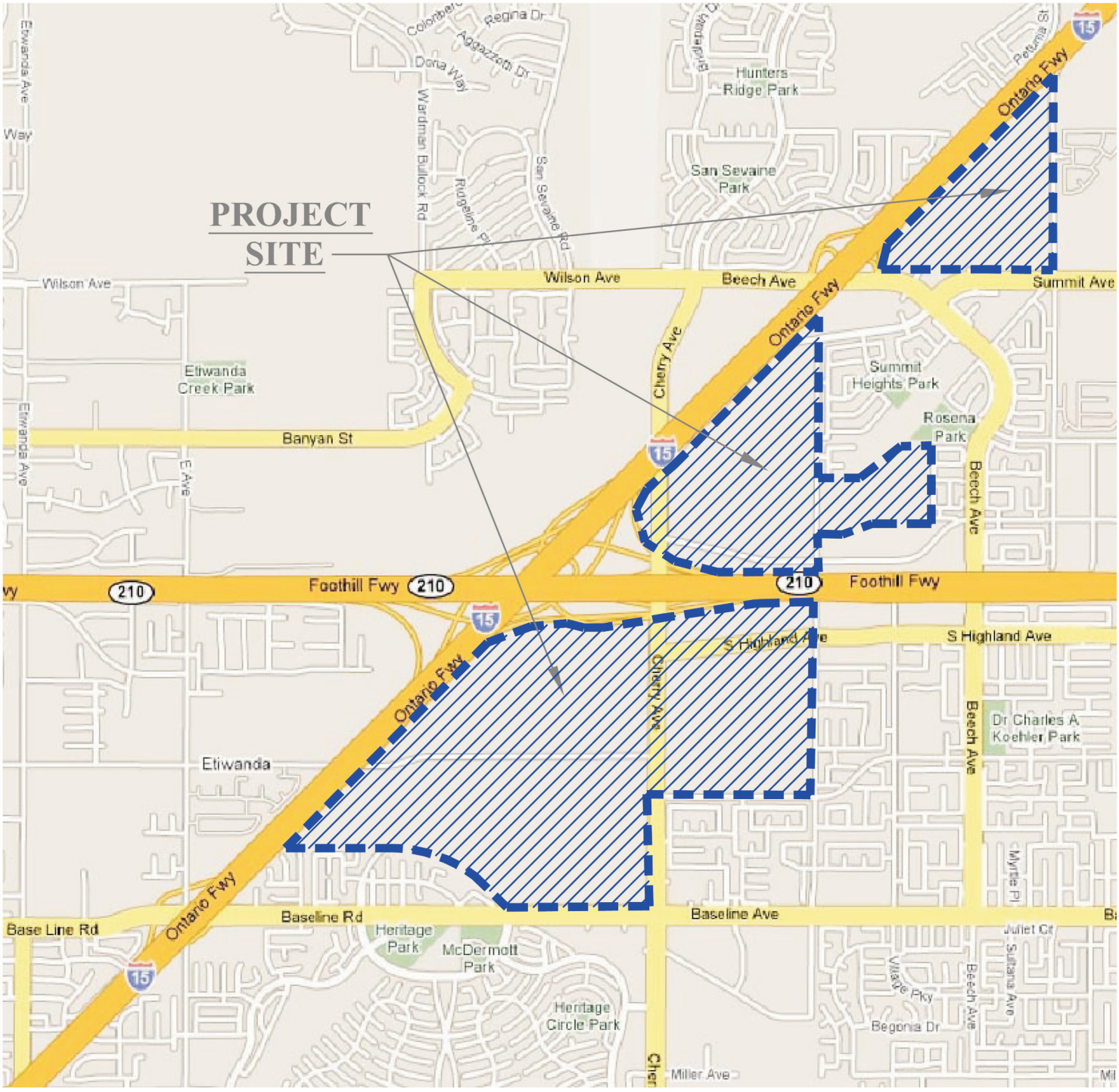
Regional Map

Westgate Specific Plan

Source: JHA Consulting, Inc., 2011.

FIGURE

2-1



PCR

N

Not to scale

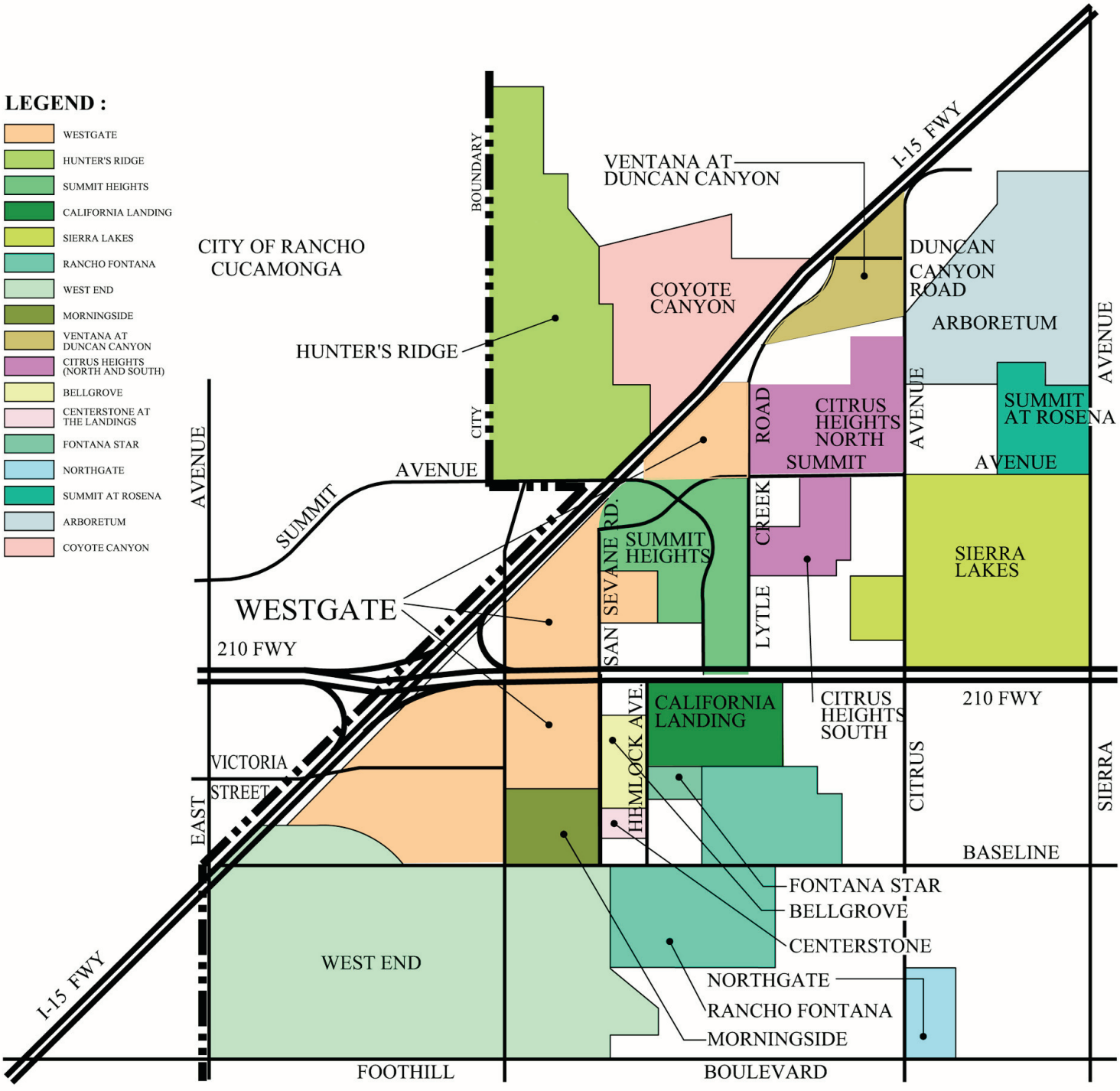
Project Vicinity Map

Westgate Specific Plan

Source: JHA Consulting, Inc., 2011.

FIGURE

2-2



PCR

N

Not to scale

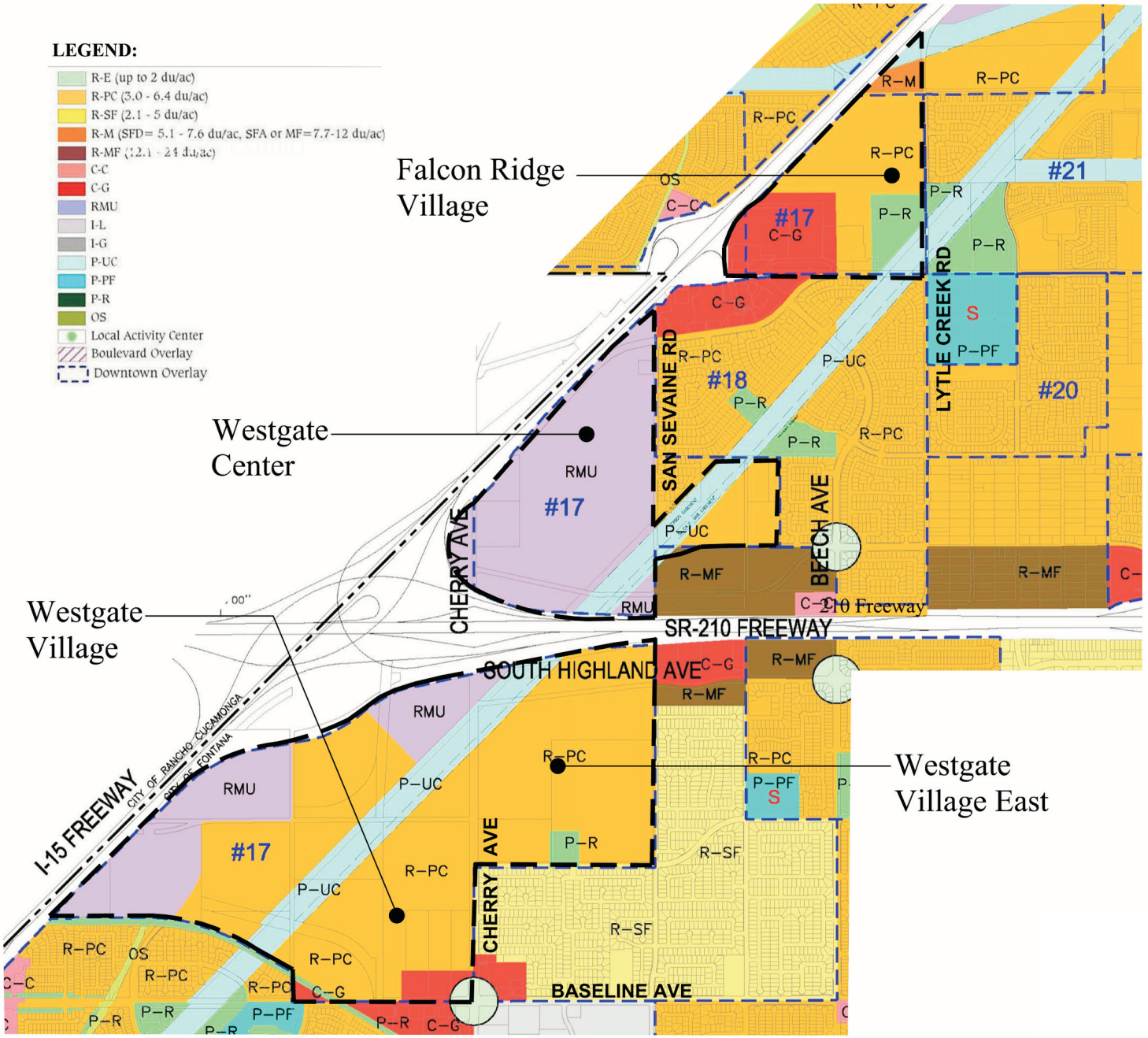
Existing Specific Plans and Community Plans

Westgate Specific Plan

Source: JHA Consulting, Inc., 2011.

FIGURE

2-3



N

0 2000 Feet

Existing General Plan Designations

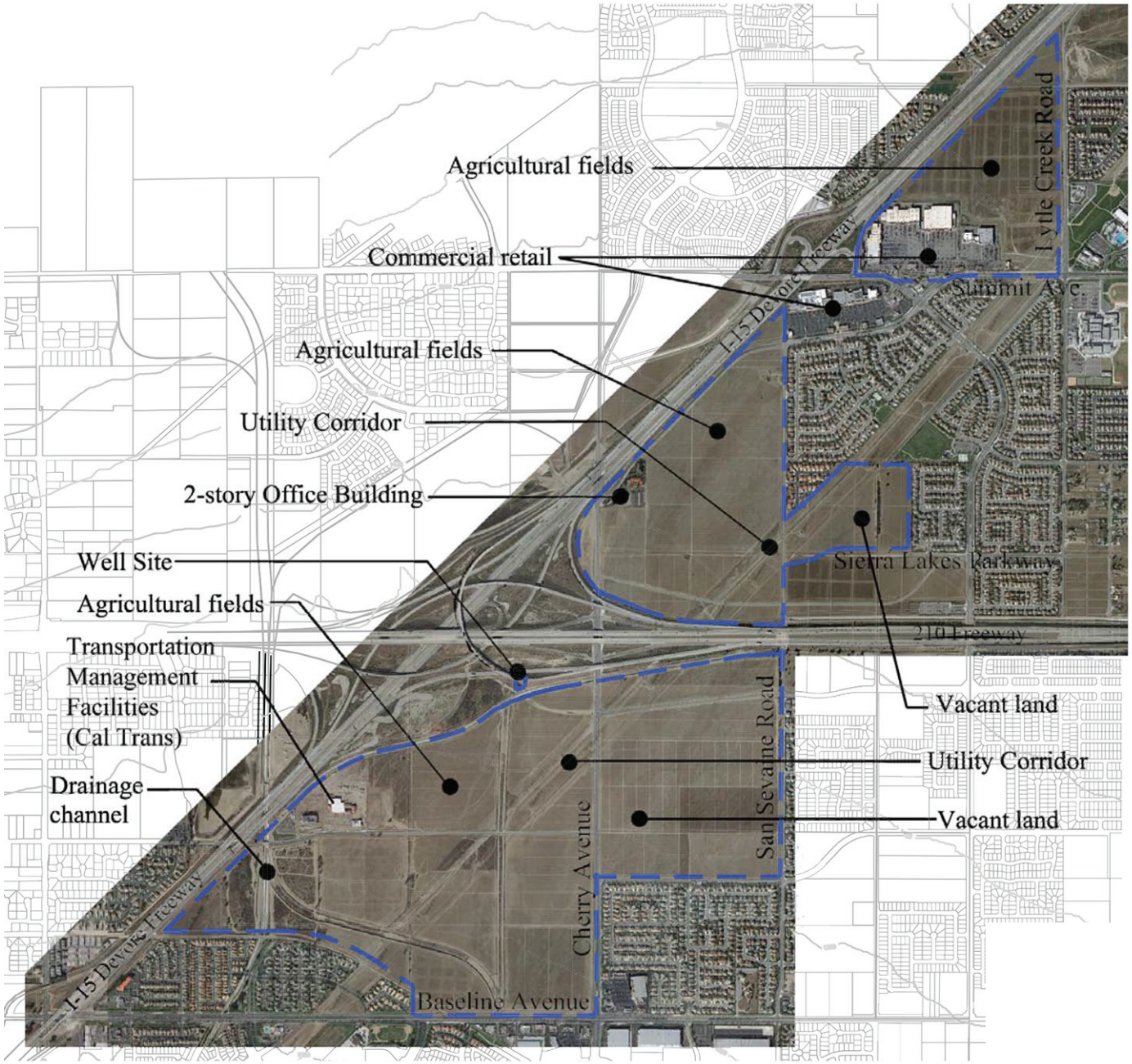
Westgate Specific Plan

Source: JHA Consulting, Inc., 2011.

FIGURE

2-4

PCR



PCR

Existing Site Conditions

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-5

This page is intentionally blank.

6. DESCRIPTION OF THE PROPOSED PROJECT

a. Project Background

The Westgate Specific Plan was adopted in 1996 by the City of Fontana. Since that time, the Inland Empire region has experienced substantial growth and the dynamics of the area have changed considerably. The SR-210/I-15 freeway overpass has been completed, with the SR-210 freeway extending easterly to the Interstate 215 (I-215) freeway. Two major development projects have also been completed within the Specific Plan boundary, including the Falcon Ridge Town Center, with 415,000 square feet of retail uses that include shops, services, and restaurants, and the Caltrans 124,000-square-foot Transportation Management Facility and Southern Regional Lab.

A tabular and graphic comparison between the adopted Westgate Specific Plan and the proposed Specific Plan is provided below in **Figure 2-6**, *Existing vs. Proposed Specific Plan*. As shown in Figure 2-6, the proposed Specific Plan would result in the following changes to the allowable development within the Specific Plan boundaries: an increase of up to 4,072 residential dwelling units; a decrease of 6.4 acres of commercial uses; an increase of approximately 52 acres of parks/open space; an increase of 74 acres of public school uses; and an increase of approximately 8.5 acres of road right-of-way. The proposed Specific Plan would also slightly modify the overall Plan boundaries resulting in a net increase of five acres. This is due to the addition of three parcels comprising a triangular area at the northernmost end of the project area (Planning Areas 1, 2, and 3 in the proposed Specific Plan), the addition of one semi-circular parcel west of and adjacent to Cherry Avenue at the I-15/SR-210 interchange (Planning Area 23 in the proposed Specific Plan), and the removal of a 9.6-acre triangular piece of land located immediately east of and adjacent to San Sevaine Road and immediately northwest of and adjacent to the existing utility corridor (Planning area 8 in the adopted Westgate Specific Plan).

b. Project Objectives

The following describes the objectives of the proposed project, which are provided in the proposed Specific Plan as "Specific Plan Goals," and are intended to implement the Plan's Community Planning Vision. The Specific Plan Goals are as follows:

Goal 1: In order to create a vibrant community, incorporate a rich diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses.

Goal 2: Create organizing elements that provide a community identity and opportunity for social interaction.

Goal 3: Develop a plan that generates employment opportunities and improves the city's tax base.

Goal 4: Develop a plan that establishes a corporate corridor.

Goal 5: Create pedestrian friendly connectivity to main activity nodes, including employment, shopping, schools and recreation.

Goal 6: Create a diversity of housing types within a high amenity setting.

Goal 7: Create a village structure.

Goal 8: Provide quality master planning, architectural and landscape architectural standards.

Goal 9: Develop a compact community to promote a healthy village character, enhance sustainability and conserve resources.

Goal 10: Create a community with a high quality of life.

c. Project Components

The following describes all the components of the proposed Specific Plan, including land uses, parks and recreation areas, circulation, public facilities and community services elements that would provide for the orderly development of the Westgate Specific Plan. The Westgate Specific Plan sets forth a range of land uses that focuses on creating a village-oriented mixed-use development that implements the vision, goals, policies and objectives described in the proposed new Specific Plan. The Plan provides a broad range of uses including residential, school, retail, office, business and open space uses. The retail, business and office park areas would serve to enhance the City's employment base, establish a corporate corridor, augment the city's tax revenue, and provide opportunities for people to work and shop in the same locale. The residential uses provide a range of single family detached, attached, stacked flats and multi-family homes to appeal to a broad cross-section of the market in a pedestrian-friendly village environment. The various Specific Plan components are discussed in detail below.

(1) Land Use Plan & Summary

Figure 2-7, *Proposed Land Use Plan*, illustrates the overall land use plan for The Westgate Specific Plan with a summary of those uses provided below. The community is comprised of four villages as shown in **Figure 2-8**, *Proposed Village Map*. These villages, including their community structure and design, are discussed following the summary presented for each village. All of the land uses within each village are incorporated into 68 development areas, designated as "Planning Areas" (PAs). **Table 2-1**, *Planning Area Land Use Summary*, below, provides the total acres for each land use including total dwelling units planned. It should be noted that the City has requested that the capacity for additional residential density be provided within the Westgate Specific Plan, in order to help the City reach its State-mandated long-term housing requirements. Such additional housing could be provided on up to 20 acres within Planning Area 24 by allowing residential density up to 50 dwelling units per acre as a permitted use, for a total of up to 1,000 additional residential units, which would replace the planned Mixed-Use 1 land uses on that portion of the planning area. While implementation of this development scenario is not considered likely, it is nonetheless evaluated throughout this Draft EIR in order to address the potential effects of the additional housing within the Specific Plan area.

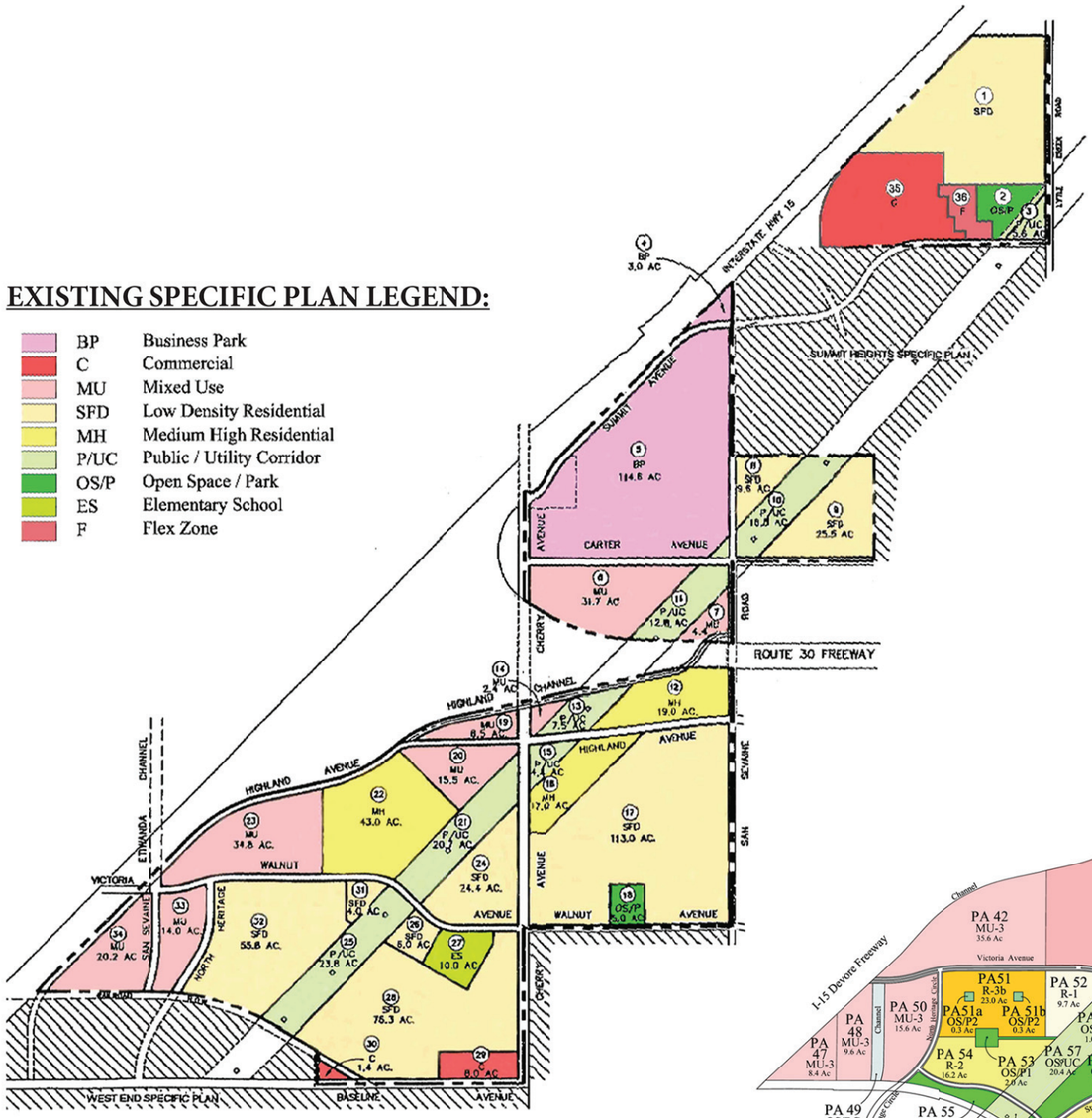
(a) Commercial Land Uses

The Westgate Specific Plan includes 302.4 acres of Mixed-Use and Retail uses.[1] These uses are located principally adjacent to the Route 210 and I-15 Freeway corridors and comprise approximately 31 percent of

[1] *If high density residential uses are developed on up to 20 acres in Planning Area 24, a total of 282.4 acres of Mixed-Use and Retail uses would be provided within the Specific Plan.*

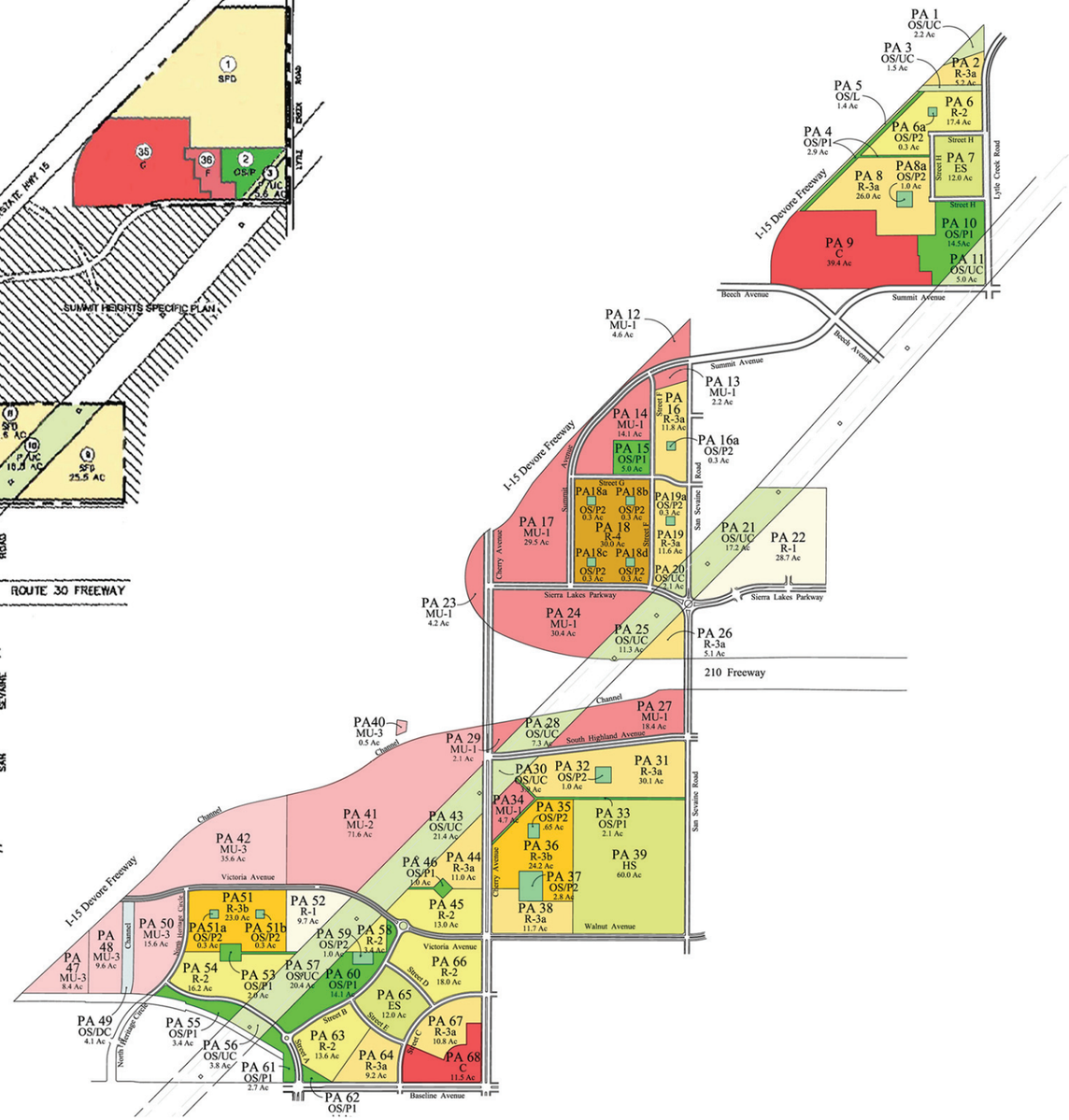
EXISTING SPECIFIC PLAN LEGEND:

BP	Business Park
C	Commercial
MU	Mixed Use
SFD	Low Density Residential
MH	Medium High Residential
P/UC	Public / Utility Corridor
OS/P	Open Space / Park
ES	Elementary School
F	Flex Zone



EXISTING SPECIFIC PLAN

Note:
The Buisiness Park (BP) land use under the Existing Plan is predominantly light industrial/ ware housing uses



PROPOSED SPECIFIC PLAN

SPECIFIC PLAN PROJECT SUMMARIES:

Land Use	Existing Plan		Proposed Plan		
Residential	**DU**	**Acres**	**DU**	**Acres**	
L (SFD)	1,864	386.53	148	38.4	R-1
LM			732	81.6	R-2
M			2,029	132.5	R-3a
MH	474	79.0	1,001	47.2	R-3b
H			1,500	30.0	R-4
Subtotal	**2,338**	**465.53**	**5,410**	**329.7**	
Commercial					
C		40.9		50.9	
BP		117.6		-	
MU-1		-	*	110.2	
MU-2		-		71.6	
MU-3		-		69.7	
MU		129.5		-	
F		7.97		-	
Subtotal		**295.97**		**302.4**	
Open Spaces					
OS/P (P1 Public)		15.0		47.8	
OS/P (P2 Private)		-		9.15	
OS/ UC		91.6		96.1	
OS/L		-		1.4	
OS/DC		-		4.1	
OS/OC		-		-	
Other					
ES		10.0		24.0	
HS		-		60.0	
Road R.O.W.		80.9		89.35	
Totals	**2,338**	**959.0**	**5,410***	**964.0**	

* In order to meet State of California mandated housing requirements, an additional 1,000 du (up to 50/du per acre) are permitted in MU-1, PA24.
If developed with residential uses, the total project du may increase up to 6,410.

PROPOSED SPECIFIC PLAN LEGEND:

C	Commercial Retail
MU-1	Mixed Use - 1
MU-2	Mixed Use - 2
MU-3	Mixed Use - 3
R-1	Residential - 1
R-2	Residential - 2
R-3a	Residential - 3a
R-3b	Residential - 3b
R-4	Residential - 4
ES	Elementary School
HS	High School
OS/P1	Open Space / Public Park
OS/P2	Open Space / Private Park
OS/UC	Open Space / Utility Corridor
OS/L	Open Space / Landscape
OS/DC	Open Space / Drainage Corridor

PCR

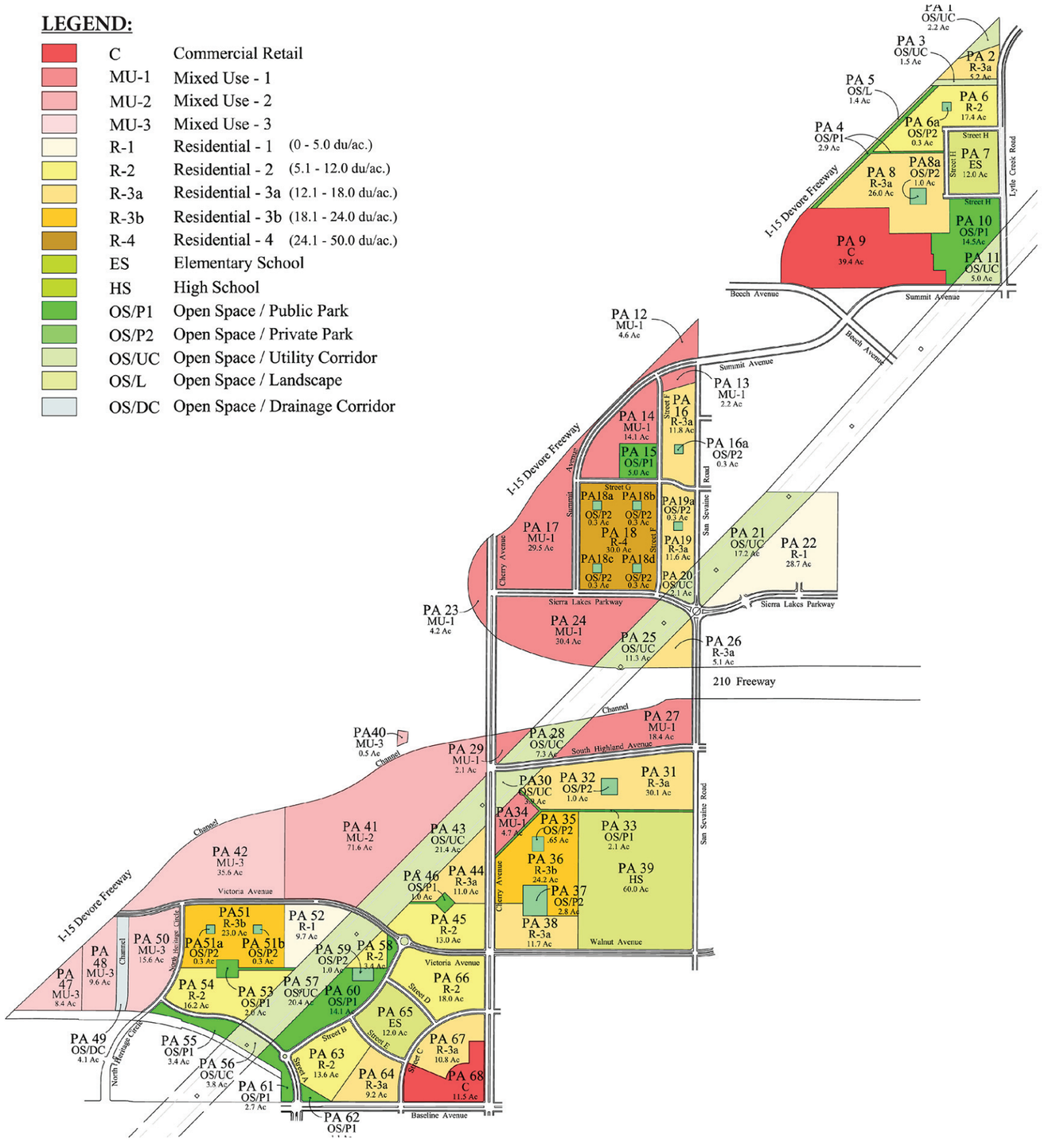
Existing vs. Proposed Specific Plan Comparison

Westgate Specific Plan
Source: Westgate Specific Plan, 2015.

FIGURE
2-6

LEGEND:

C	Commercial Retail	
MU-1	Mixed Use - 1	
MU-2	Mixed Use - 2	
MU-3	Mixed Use - 3	
R-1	Residential - 1	(0 - 5.0 du/ac.)
R-2	Residential - 2	(5.1 - 12.0 du/ac.)
R-3a	Residential - 3a	(12.1 - 18.0 du/ac.)
R-3b	Residential - 3b	(18.1 - 24.0 du/ac.)
R-4	Residential - 4	(24.1 - 50.0 du/ac.)
ES	Elementary School	
HS	High School	
OS/P1	Open Space / Public Park	
OS/P2	Open Space / Private Park	
OS/UC	Open Space / Utility Corridor	
OS/L	Open Space / Landscape	
OS/DC	Open Space / Drainage Corridor	



PROJECT SUMMARY:

RESIDENTIAL		Acres	Density	DU
Residential -1	(R-1)	38.4 ac.	0 - 5.0	148 du
Residential -2	(R-2)	81.6 ac	5.1 - 12.0	732 du
Residential -3a	(R-3)	132.5 ac	12.1 - 18.0	2,029 du
Residential -3b	(R-3B)	47.2	18.1 - 24.0	1,001
Residential -4	(R-4)	30.0	24.1- 50.0	1,500
Total		**329.7 ac**		**5,410 du***

*In order to meet State of California madated housing requirements, an additional 1,000 du (up to 50du/ac) are permitted in MU-1, PA 24. If developed with residential uses, the total project du may increase up to 6,410.

COMMERCIAL		Acres
Commercial Retail	(C)	50.9 ac
Mixed Use-1	(MU-1)	110.2 ac*
Mixed Use-2	(MU-2)	71.6 ac
Mixed Use-3	(MU-3)	69.7 ac
Total		**302.4 ac**

OPEN SPACE		Acres
Open Space/Public Parks	(P-1)	47.8 ac
Open Space/Private Parks	(P-2)	9.15 ac
Open Space/Landscape	(OS/L)	1.4 ac
Open Space/Utility Corridors	(OS/ UC)	96.1
Open Space/Drainage Corridors)	(OS/ DC)	4.1
Elementary School Site	(ES)	24.0 ac
High School Site	(HS)	60.0 ac
Total		**242.55**

OTHER		
Major Street Rights-of-Way		89.35 ac
GRAND TOTAL		**964.0 ac**

PCR

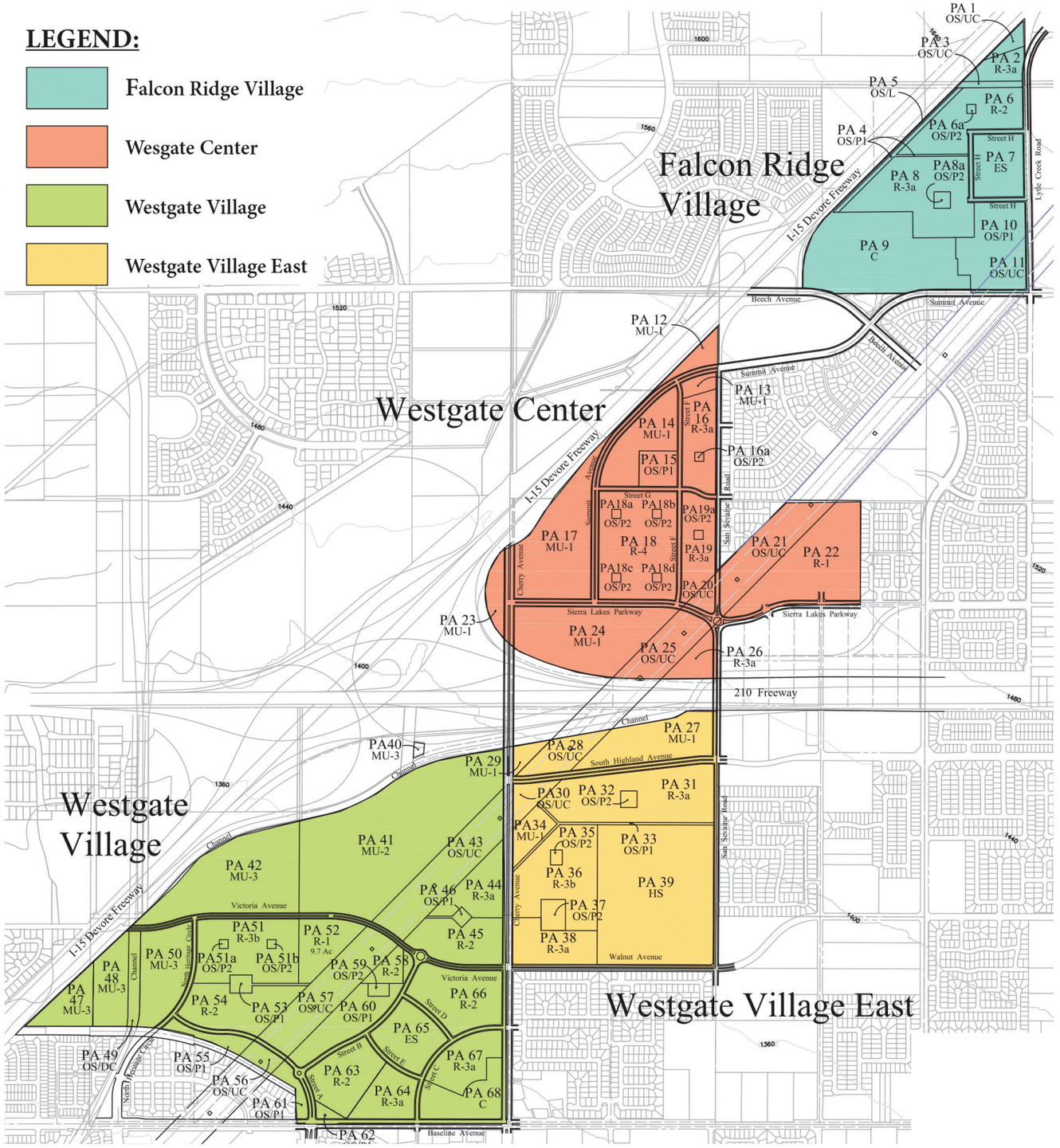
N

Proposed Land Use Plan

Westgate Specific Plan

Source: Westgate Specific Plan, 2015.

FIGURE **2-7**



N

0 1500 Feet

PCR

Proposed Villages Map

Westgate Specific Plan
Source: JHA Consulting, Inc., 2014.

FIGURE
2-8

This page is intentionally blank.

Table 2-1

Planning Area Land Use Summary

Land Use Description	Acres	Target Dwelling Units [a]
Mixed-Use 1 (MU-1)	110.2[b]	
Mixed-Use 2 (MU-2)	71.6	
Mixed-Use 3 (MU-3)	69.7	
Commercial Retail (C)	50.9	
Residential-1 (R-1)	38.4	148
Residential-2 (R-2)	81.6	732
Residential-3a (R-3a)	132.5	2,029
Residential-3b (R-3b)	47.2	1,001
Residential-4 (R-4)	30.0[c]	1,500[c]
Open Space/Public Park (P1)	47.8	
Open Space/Private Park (P2)	9.15	
Open Space/Landscape (OS/L)	1.4	
Open Space/Utility Corridors (OS/UC)	96.1	
Open Space/Drainage Corridor (OS/DC)	4.1	
High School (HS)	60.0	
Elementary Schools (ES)	24.0	
Other (Major road rights-of-way)	89.3	
TOTAL ACRES	**964.0**	
MAXIMUM DWELLING UNITS		**5,410[d]**

[a] *Refer to Section 6.5, Definition of Target Dwelling Units, Target Density, Density Range and Density Transfer, in the proposed Specific Plan for discussion of Target Dwelling Units and Transfer of Dwelling Units.*

[b] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total acreage of MU-1 business park uses within the Specific Plan area would be reduced by 20.0 acres to a total of 90.2 acres.*

[c] *If high density residential uses are developed on up to 20 acres in Planning Area 24, R-4 uses within the Specific Plan area would be increased by 20.0 acres to a total of 50.0 acres and 2,500 target dwelling units.*

[d] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total target dwelling units within the Specific Plan area would be increased by 1,000 dwelling units to a total of 6,410 dwelling units.*

Source: Westgate Specific Plan, 2014

the 964-acre Specific Plan area. When comparing to the total combined commercial and residential planned development areas, commercial uses total over 48 percent of the Specific Plan.[2] A 39.4-acre community scale shopping center, Falcon Ridge Towne Center, has been constructed and is located within the Specific Plan boundaries along the I-15 corridor on Summit Avenue, with a neighborhood center planned at the northwest corner of Baseline and Cherry Avenue. The anticipated square footage of all proposed office, retail, and industrial uses within the Specific Plan is summarized below in **Table 2-2**, *Development Summary for Proposed Commercial Uses*.

[2] *If high density residential uses are developed on up to 20 acres in Planning Area 24, commercial uses would total nearly 45% of total combined commercial and residential planned development areas in the Specific Plan.*

Table 2-2

Development Summary for Proposed Commercial Uses[a]

	Retail (0.25 FAR)[b,c]	Office (0.40 FAR)[b,c]	Industrial (0.40 FAR)[b,c]
Falcon Ridge Village	446,000 SF	-	-
Westgate Center	-	1,332,937 SF[d]	148,104 SF[d]
Westgate Village	157,235 SF	779,024 SF	1,355,475 SF
Westgate Village East	-	305,442 SF	133,642 SF
TOTAL	**602,235 SF**	**2,417,403 SF[e]**	**1,637,221 SF[e]**

[a] *Development area is described in square feet (SF)*

[b] *Floor Area Ratio (FAR) is the ratio of building floor area to total lot area.*

[c] *Planning Areas 9 and 42 (partial area) based on actual completed square feet, which includes approximately 415,000 square feet of retail uses within Falcon Ridge Village (i.e., Falcon Ridge Town Center) and approximately 124,000 square feet of industrial uses within Westgate Village (Caltrans Transportation Management Facility and Southern Regional Lab).*

[d] *If high density residential uses are developed on up to 20 acres in Planning Area 24, office and industrial uses would only be developed on the remaining 10.4 acres, which would reduce overall development of these uses within Westgate Center by 313,632 square feet of office space and 34,848 square feet of industrial space for a new total of 163,089 square feet of office uses and 18,121 square feet of industrial uses.*

[e] *If high density residential uses are developed on up to 20 acres in Planning Area 24, total office and industrial development within the Specific Plan would be 2,103,771 square feet and 1,602,373 square feet, respectively.*

Source: Westgate Specific Plan, 2014

(b) Residential Land Uses

Residential land uses are located throughout the community and are designed to establish a village character. The residential uses are interconnected to the entire Westgate Community and surrounding uses through pedestrian walks and both off and on-street bicycle lanes. Approximately 329.7 acres of residential uses are planned with 5,410 total maximum dwelling units.[3]

(c) Open Space, Parks, Recreation and Trails

The Westgate Specific Plan provides a variety of open space, parks, recreation and trail uses. Public and private parks total 56.95 acres, plus approximately 100.2 acres of additional open space within utility and drainage corridors. The continuation of the City wide regional trail is planned within the utility corridor and SANBAG right-of-way that would also interconnect many village areas within The Westgate Specific Plan. Parks and recreation areas would include active uses such as ball fields, tennis courts, basketball courts, tot lots, exercise courses and passive uses for picnic stations, barbeque and other amenities. All public parks, the three school sites, and the regional trail are interconnected by on- and off-street bike lanes.

[3] *If high density residential uses are developed on up to 20 acres in Planning Area 24, a total of349.7 acres of residential uses with 6,410 target dwelling units would be developed within the Specific Plan area.*

(d) Public Schools

Two elementary school sites and one high school site are included in the Plan, totaling 84.0 acres. The high school site, located within the Chaffey Joint Union High School District, is 60 acres in size, while the elementary school sites of 12 acres each are located within the Etiwanda School District. The high school site (Planning Area 39) and one elementary school site (Planning Area 7) have already been acquired in fee by the respective school districts.

(e) Dedicated Public Rights-of-Way

Dedicated major public road rights-of-way shown on the land use and circulation plan would occupy approximately 89.35 acres of land.

(2) Community Structure and Village Design

Following is a summary of the overall community structure, description of the village design and discussion of the integration of business park, retail, residential uses and amenities in the form of parks, recreation, trails and open space. Sections 4.0 and 5.0 of the proposed Specific Plan include development regulations and design guidelines, respectively. These sections provide standards to implement the community structure and to assure that a high quality of development results in all aspects of community.

Four villages have been designed as part of the Westgate Specific Plan as shown above in Figure 2-8. The villages were defined based on a logical clustering of development in relationship to the overall Specific Plan site and context, and to meet the community vision and objectives. While each village would have its own unique identity and character, they have been integrated into a cohesive and unified land use plan.

The four individual village areas are shown on **Figures 2-9** to **2-12**. In addition to defining the individual land uses and planning areas within each village, these figures include general planning information and design criteria. They also illustrate the relationship between planning areas to each other and to the adjacent city context.

(a) Falcon Ridge Village

Shown in **Figure 2-9**, *Falcon Ridge Village Land Use Plan*, Falcon Ridge Village is intended to complement the existing Falcon Ridge Towne Center that is part of this village, and includes retail, park, recreation, school and residential uses. A centrally located elementary school is designed to provide a community hub for both Falcon Ridge Village and other nearby residential neighborhoods. The school site, 39.4-acre Falcon Ridge shopping center, and park areas are all within a five- to ten-minute walk of the planned homes. For reference purposes throughout this Specific Plan, a walking speed of three miles per hour is used to estimate walking times.

Residential uses include single-family detached cottage, paseo and court cluster-type homes, as well as attached and multi-family homes, with 697 projected dwelling units. Detached single-family cluster type homes are planned adjacent to Lytle Creek Road to provide a transition to existing single-family homes to the east. **Table 2-3**, *Falcon Ridge Village Summary*, below, provides a breakdown of proposed uses within the village. Refer to Section 4.0 of the proposed Specific Plan for various home types planned for these planning

Table 2-3

Falcon Ridge Village Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
COMMERCIAL RETAIL					
9	Commercial Retail	39.4			
RESIDENTIAL					
2	R-3a	5.2	12.1-18.0	14.0	73
6	R-2	17.4	5.1-12.0	9.0	156
8	R-3a	26.0	12.1-18.0	18.0	468
Subtotal		***49.5***			***697***
PARKS/OPEN SPACE					
1	Open Space/Utility Corridor	2.2			
3	Open Space/Utility Corridor	1.5			
4	Open Space/Public Park	2.9			
5	Open Space/Landscape	1.4			
6a	Open Space/Private Park	0.3			
8a	Open Space/Private Park	1.0			
10	Open Space/Public Park	14.5			
11	Open Space/Utility Corridor	5.0			
Subtotal		***28.8***			
OTHER					
6	Elementary School	12.0			
TOTAL [a]		**129.7**			

[a] *Roads not included*

Source: Westgate Specific Plan, 2014

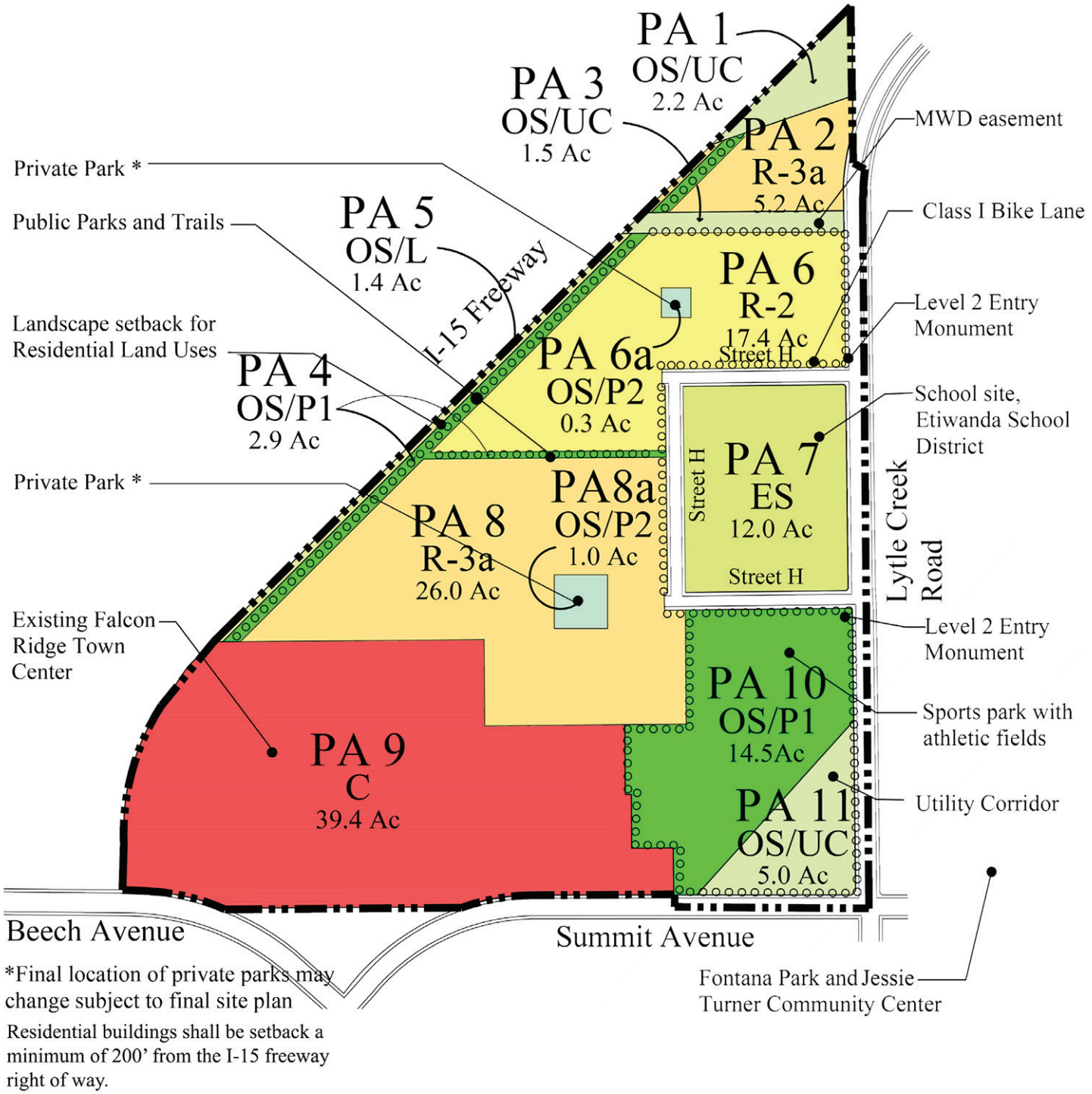
areas, and refer to the Community Design section (Section 5.0) of the proposed Specific Plan for site planning, architecture and landscape guidelines.

(b) Westgate Center

Westgate Center is designed as an integrated mixed use business and residential setting with high amenity urban life style options. With 85 acres of mixed-use business park uses planned, it would provide a major regional employment hub located along both the I-15 and Route 210 freeways, while a total of 2,037 projected residential dwelling units with multiple park sites are also planned.[4] **Table 2-4**, *Westgate Center Summary*, below, provides a breakdown of proposed uses within the village, while **Figure 2-10**, *Westgate Center Land Use Plan*, illustrates the proposed land use plan for this area.

The mixed-use business parks have excellent visibility from the I-15 freeway with direct vehicular access to the property provided at the Route 210/Cherry Avenue interchange. The location of mixed-use districts along the two freeway corridors would provide a major catalyst in establishing the City's corporate corridor,

[4] *As noted previously, Planning Area 24 could be developed with R4 residential uses up to 50 dwelling units per acre, which would increase the total target dwelling units within Westgate Center to 3,037 units, or an increase of 1,000 units over the proposed Specific Plan. Consequently, 20.0 acres of Mixed-Use 1 land uses within Planning Area 24 would be removed from Westgate Center (which is assumed to translate to 313,632 square feet of office space and 34,848 square feet of industrial space) for a new total of 163,089 square feet of office uses and 18,121 square feet of industrial uses on the remaining 10.4 acres.*



PCR

N

0 300 Feet

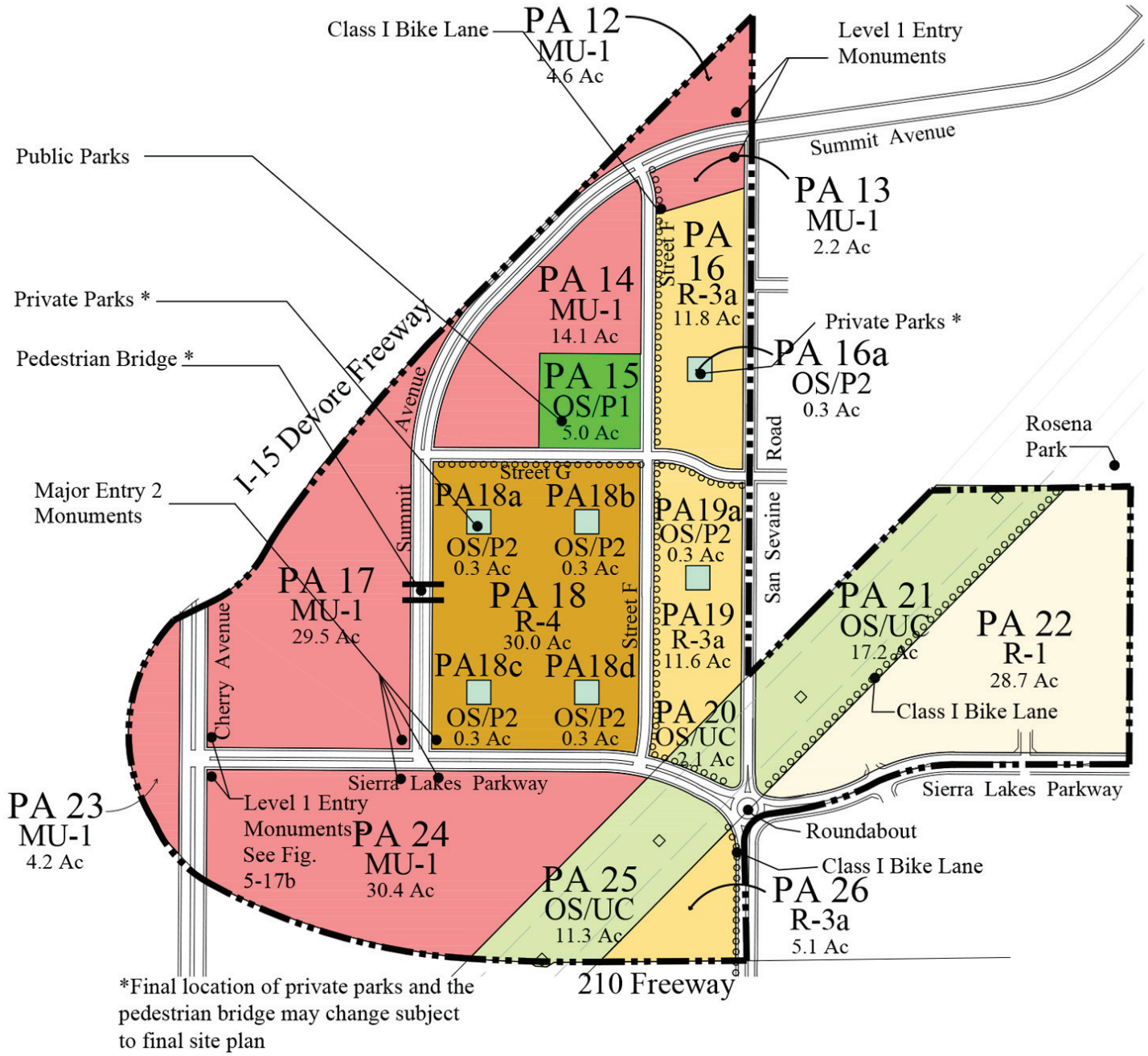
Falcon Ridge Village Land Use Plan

Westgate Specific Plan

Source: Westgate Specific Plan, 2015.

FIGURE

2-9



PCR

N

0 1000 Feet

Westgate Center Land Use Plan

Westgate Specific Plan

Source: Westgate Specific Plan, 2015.

FIGURE

2-10

Table 2-4

Westgate Center Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
BUSINESS PARK					
12	Mixed-Use 1	4.6			
13	Mixed-Use 1	2.2			
14	Mixed-Use 1	14.1			
17	Mixed-Use 1	29.5			
23	Mixed-Use 1	4.2			
24	Mixed-Use 1	30.4 [b]			
Subtotal		***85.0*** [b]			
RESIDENTIAL					
16	R-3a	11.8	12.1-18.0	15.0	177
18	R-4	30.0	24.1-50.0	50.0	1,500
19	R-3a	11.6	12.1-18.0	15.0	174
22	R-1 (7,200 s.f. minimum lots)	28.7	0-5.0	3.8	110
26	R-3a	5.1	12.1-18.0	15.0	76
Subtotal		***87.1*** [c]			***2,037*** [c]
OPEN SPACE					
15	Open Space/Public Park	5.0			
15a	Open Space/Public Park	3.5			
16a	Open Space/Private Park	0.3			
18a	Open Space/Private Park	0.3			
18b	Open Space/Private Park	0.3			
18c	Open Space/Private Park	0.3			
18d	Open Space/Private Park	0.3			
19a	Open Space/Private Park	0.3			
20	Open Space/Utility Corridor	2.1			
21	Open Space/Utility Corridor	17.2			
25	Open Space/Utility Corridor	11.3			
Subtotal		***37.4***			
TOTAL [a]		**209.6**			**2,037** [c]

[a] *Roads not included in total. Planning Area 22 has an approved Tentative Tract Map with minimum 7,200 square feet lots and includes a trail within the adjacent utility corridor that is part of City wide regional trail system.*

[b] *Planning Area 24 could be developed with up to 20.0 acres of R4 Residential uses at a density of up to 50 dwelling units per acre, for a total of 1,000 target residential units. As such, the total acreage of Mixed-Use 1 uses within Westgate Center would be reduced to 65.0 acres.*

[c] *If high density residential uses are developed within Planning Area 24, total residential acreage within Westgate Center would be increased by 20.0 acres for a total of 107.1 acres and total target residential units would be increased by 1,000 units to a total of 3,037 units.*

Source: Westgate Specific Plan, 2014

and allowable uses include retail, entertainment, medical, corporate, professional, business and e-commerce uses. Located adjacent to the Mixed-Use areas are high density (R-4) residential uses. The location would encourage people to walk and/or bike to the business park, retail and park uses, reinforcing the goal of creating a pedestrian friendly, sustainable community. "Mansion style" multi-family homes (R-3a) are located adjacent to the R-4 land uses along San Sevaine Road. Planned to be reminiscent of early California estates, they would be designed to complement the existing single family homes along San Sevaine Road. Residential uses to the east, within Planning Area 22, are planned for minimum 7,200-square-foot lots.

Opportunities for live-work homes, intended for work-at-home professionals such as realtors, architects, accountants, and hair stylists, are included within the high density R-4 designation. Such opportunities would also be provided for R-4 residential uses within Planning Area 24 if R-4 residential uses are ultimately developed at this location.

Residential uses within Westgate Center are oriented to multiple recreation and park areas, including a centrally located five-acre park planned for a community building, pool, tennis courts, basketball courts, volleyball, benches, outdoor fireplace, and picnic areas. Facilities within the community building would include a multipurpose room, game room, and other amenities. The community building would provide a strong architectural feature and focal point for Westgate Center.

With the high density residential and business park uses in close proximity to one another, an opportunity may arise for locating a commercial sports/health club facility within Westgate Center as a complementary park use. Therefore, this type of use is also considered an optional use within or adjacent to the park site.

In addition to the above community building, either an additional freestanding clubhouse facility or a facility designed as an integral part of the multi-family buildings would be provided in Planning Area 18 (and Planning Area 24 if residential uses are developed) to include such facilities as a game room, media room, kitchen and other complementary uses.

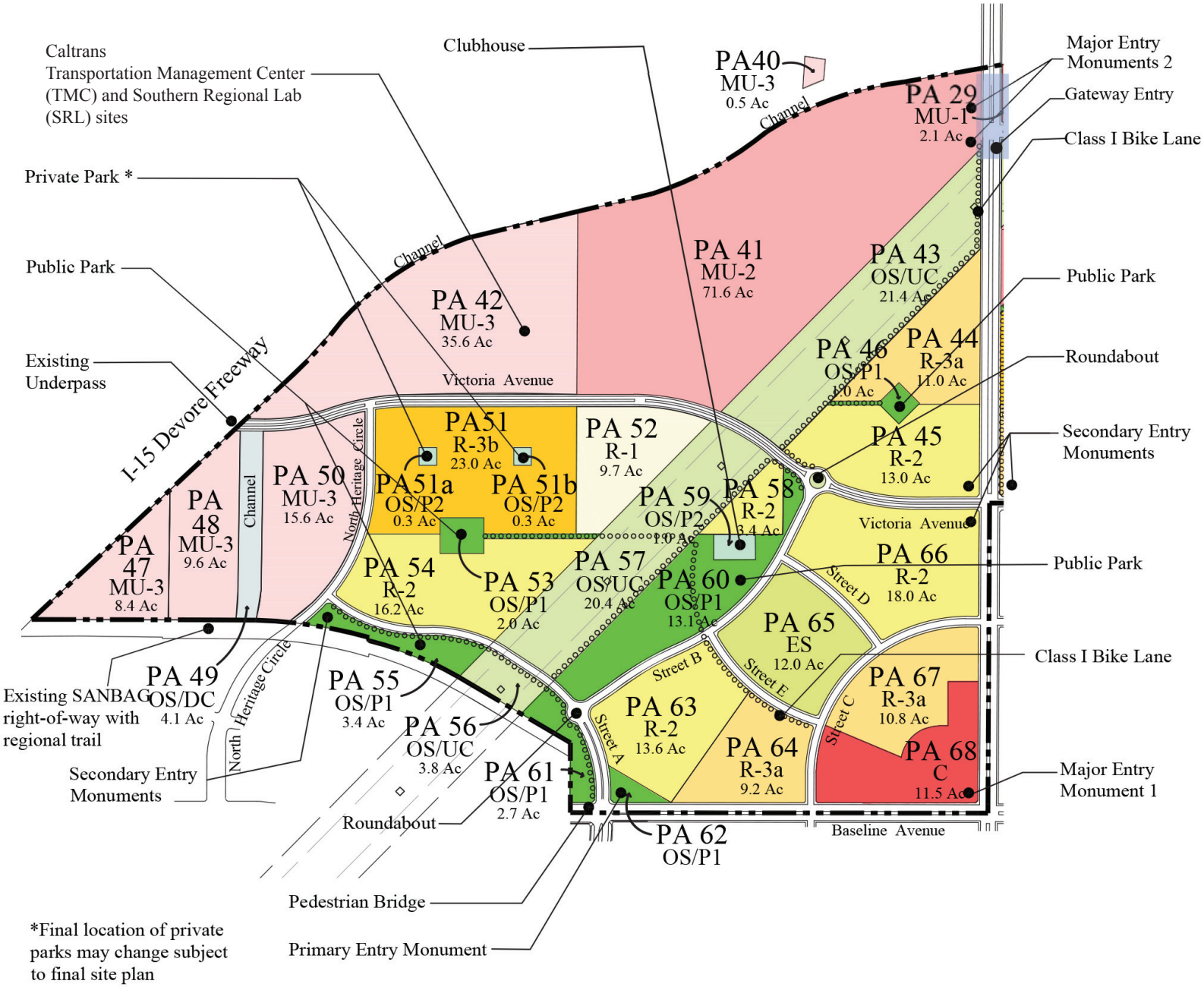
(c) Westgate Village

Westgate Village provides a diversity of uses including mixed-use business parks, a light industrial use for warehousing and distribution, a neighborhood retail center, residential uses and an elementary school site all within walking distance of one another. Open space uses comprise over 1/3 of the total residential site areas and include 23 acres of neighborhood parks and a lake. All community uses are linked together through sidewalks and nearly two miles of bikeways. **Figure 2-11**, *Westgate Village Land Use Plan*, below, illustrates the proposed land use plan for this area, while **Table 2-5**, *Westgate Village Summary*, provides a breakdown of proposed uses within the village.

A new city "gateway" is planned as part of the design for Westgate Village at Cherry Avenue, the first major interchange for those arriving from the west into the City of Fontana. Business and e-commerce mixed uses are planned along the freeway corridors within the Mixed Use-2 (MU-2) and Mixed Use-3 (MU-3) designations. During the past few years the California State Department of Transportation (CalTrans) has completed the Transportation Management Center and Regional Lab in Planning Area 42 (refer to Figure 2-11 above for the location of the CalTrans facility). The MU-3 designation is intended to encourage other similar facilities that include public, quasi-public and private users.

The MU-2 land use, adjacent to the Route 210 Freeway in Planning Area 41, provides for warehouse and distribution uses, plus a support retail component. Section 4.0, Development Regulations, and Section 5.0, Community Design, of the proposed Specific Plan include site plan, architectural and landscape architectural standards to insure that large buildings would be buffered from public view. Only small-scale, retail-oriented uses would be located be adjacent to Cherry Avenue.

The elementary school site in Planning Area 65 is centrally located to the residential areas and would provide a community hub for Westgate Village. Residential uses include 1,585 projected dwelling units with



PCR

N

0 1000 Feet

Westgate Village Land Use Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-11

This page is intentionally blank.

Table 2-5

Westgate Village Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
COMMERCIAL RETAIL					
68	Commercial Retail	11.5			
BUSINESS PARK					
40	Mixed-Use 3	0.5			
41	Mixed-Use 2	71.6			
42	Mixed-Use 3	35.6[a]			
47	Mixed-Use 3	8.4			
48	Mixed-Use 3	9.6			
50	Mixed-Use 3	15.6			
Subtotal		**159.7**			
RESIDENTIAL					
44	R-3a	11.0	12.1-18.0	15.0	165
45	R-2	13.0	5.1-12.0	9.0	117
51	R-3b	23.0	18.1-24.0	22.0	506
52	R-1	9.7	0.0-5.0	3.9	38
54	R-2	16.2	5.1-12.0	9.0	145
58	R-2	3.4	5.1-12.0	9.0	30
63	R-2	13.6	5.1-12.0	9.0	122
64	R-3a	9.2	12.1-18.0	15.0	138
66	R-2	18.0	5.1-12.0	9.0	162
67	R-3a	10.8	12.1-18.0	15.0	162
Subtotal		**127.9**			**1,585**
PARKS/OPEN SPACE					
43	Open Space/Utility Corridor	21.4			
46	Open Space/Public Park	1.0			
49	Open Space/Drainage Corridor	4.1			
51a	Open Space/Private Park	0.3			
51b	Open Space/Private Park	0.3			
53	Open Space/Public Park	1.0			
55	Open Space/Public Park	3.4			
56	Open Space/Utility Corridor	3.8			
57	Open Space/Utility Corridor	20.4			
59	Open Space/Private Park	1.0			
60	Open Space/Public Park	13.1			
61	Open Space/Public Park	2.7			
62	Open Space/Public Park	1.1			
Subtotal		**74.6**			
OTHER					
66	Elementary School	12.0			
TOTAL [a]		**385.7**			**1,585**

[a] *Planning Area 42 includes 19.0 acres of undeveloped land and 16.6 acres of land currently developed with 124,000 square feet of retail and public facility uses.*

[b] *Roads not included.*

Source: Westgate Specific Plan, 2014

a broad range of housing types including single family homes on 7,200 minimum square feet lots, single family detached cottage, paseo and court cluster homes, townhomes and multi-family homes. Additionally, a three-acre senior housing site is planned in Planning Area 67.

Amenities for Westgate Village include multiple public and private parks linked together with sidewalks and nearly two miles of bike paths. There are a total of 23.3 acres of public parks and 1.6 acres of private parks, as described in further detail below. The public parks would provide a variety of active and passive uses, including tennis courts, basketball courts, gardens, trails, exercise course, benches and picnic stations. Private parks provide pools, spas and other amenities.

- Within Planning Area 60, a 13.1 acre public park is planned with a lake as a focal point and community gathering area. A private clubhouse and pool complex on a one-acre site is located adjacent to the lake that would serve all Westgate Village residents. The clubhouse would provide a location for community functions and include such facilities as a media room, game room and exercise room. It would be oriented take advantage of the views of the lake and of the San Gabriel and San Bernardino Mountains to the north.

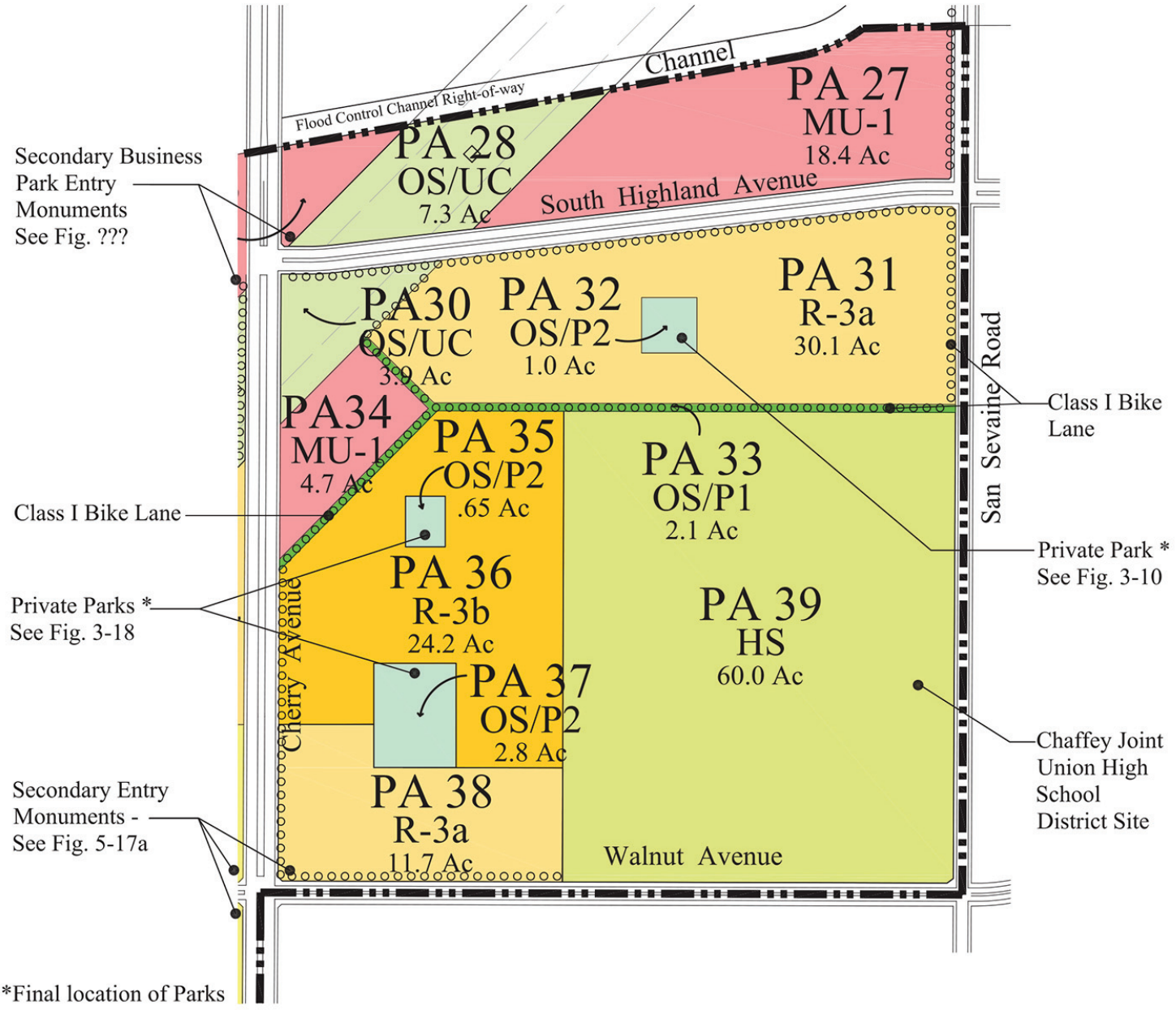
- Public parks in Planning Areas 55 and 61 total 6.1 acres and include a walking/jogging bike trail, exercise course, and picnic stations. The combined site is nearly 10 acres if the adjacent utility corridor open space in Planning Area 56 is included. In addition to serving Westgate residents, this park is designed to complement the regional trail adjacent in the adjacent SANBAG right of way by providing regional trail users with a resting point that includes picnic areas. It would also provide a greenbelt buffer and park amenity for the existing homes in the Village of Heritage to the south.
- Private recreation areas are located within Planning Area 51 and would each include a pool, spa, and sports court, among other amenities.
- Class I and Class II bike paths are planned to interconnect all Westgate Village residential uses to parks and recreation areas, the neighborhood retail center, including the school sites in Westgate and Westgate Village East. All streets would include parkways between the sidewalks and curb to provide a safe and attractive walkable community. Whether bicycling or walking, Westgate Village residents would be within 10 to 15 minutes of all park and recreation amenities including the neighborhood shopping center.

- Public parks are centrally located within residential neighborhood areas. Public parks in Planning Areas 46 and 53, one acre and two acres in size, respectively, include active and passive uses.

A pedestrian bridge is planned at Baseline Avenue to provide a grade separated crossing over the six-lane divided road. The bridge would provide multiple community-wide benefits described more fully in Section 3.4.7 of the proposed Specific Plan with a design concept of the type of bridge that is envisioned at this location.

(d) Westgate Village East

Westgate Village East, illustrated below in **Figure 2-12**, *Westgate Village East Land Use Plan*, includes over 25 acres of mixed-use business park and e-commerce uses, residential uses with 1,091 dwelling units, four parks, and a high school site; it should be noted that the Chaffey Joint Union High School District purchased the high school site in 2007 and also plans to construct a fully lighted stadium. **Table 2-6**, *Westgate Village East Summary*, below, provides a breakdown of proposed uses within the village.



PCR

N

0 800 Feet

Westgate Village East Land Use Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-12

This page is intentionally blank.

Table 2-6

Westgate Village East Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
BUSINESS PARK					
27	Mixed-Use 1	18.4			
29	Mixed-Use 1	2.1			
34	Mixed-Use 1	4.7			
Subtotal		***25.2***			
RESIDENTIAL					
31	R-3a	32.8	12.1-18.0	15.0	421
36	R-3b	23.1	18.1-24.0	20.5	495
38	R-3a	11.7	12.1-18.0	15.0	175
Subtotal		***66.0***			***1,091***
PARKS/OPEN SPACE					
28	Open Space/Utility Corridor	7.3			
30	Open Space/Utility Corridor	3.9			
32	Open Space/Private Park	1.0			
33	Open Space/Public Park	2.1			
35	Open Space/Private Park	0.65			
37	Open Space/Private Park	2.8			
Subtotal		***17.8***			
OTHER					
39	High School	60.0			
TOTAL*		**169.0**			**1,091**

Source: Westgate Specific Plan, 2014

Business and e-commerce uses are located principally along the Route 210 Freeway. The 4.7-acre Mixed-Use 1 use in Planning Area 34 south of the 210 freeway is planned for small-scale businesses with provisions for a mini-storage use. Residential uses include a variety of housing types and style including duplexes, townhomes, and multi-family uses. Paired single family homes are planned adjacent to Walnut Avenue would be designed to appear as one large home in order to complement existing single family homes to the south. All residential uses are located within walking distance of the high school site and recreation sites.

Planning Areas 36 and 38 would be served by two private recreation areas totaling 3.4 acres. A clubhouse building, swim and recreational complex is planned in Planning Area 37 with a pool and recreation area planned in Planning Area 35. A one-acre private park is also planned Planning Area 32 with a pool, spa and other amenities, including a sports court, trellis and shade areas with picnic benches and barbecues, and free play areas.

Class I and II bike lanes, shown on the Bikeway and Trails Plan (Figure 2-15), would provide connectivity to other community amenities in the Westgate Specific Plan including the lake and swim complex in Westgate Village, Fontana Park and the Heritage Community Center.

(3) Park, Recreation and Trail Amenities

(a) Parks & Recreation

The four villages in the Westgate Specific Plan – Westgate Village, Westgate Village East, Westgate Center, and Falcon Ridge Village include a variety of parks, recreation areas, trails and school sites interwoven throughout the community, all designed to create an attractive and inviting environment. Refer to **Figure 2-13**, *Open Space, Parks, and Schools Plan*, and **Figure 2-14**, *Public and Private Parks*, for locations of each of the parks and school sites. Also refer to **Figure 2-15**, *Bikeways and Trails Plan*, for an illustration of the proposed bikeways and trails improvements.

Public parks total 47.8 acres and include both active and passive uses such as ball fields, tennis courts, basketball courts, tot lots, exercise courses, picnic stations, and barbeque areas. All are located within a five- to seven-minute walk of the residential areas which they serve. All public parks, including the three school sites within the Specific Plan area, are interconnected by a Class I and Class II bike lanes, as noted previously and shown in Figure 2-15 below.

Private parks/recreation areas total 9.15 acres and are generally within three to five minutes of the residential areas they serve and typically include pools, spas, and plays areas. They would be complemented in higher density residential areas with tot lots or barbeque areas to be located within 800 feet of any dwelling unit. This equates to approximately a three-minute walk. Maintenance of the private parks would be provided by a homeowners association or similar entity.

The final design of each park master plan provided in this Section are subject to change based upon market differentiation, engineering, and input from the City Police and Public Works Departments. The park uses and amenities shown may shift locations or be substituted with like kind amenities as approved by the Community Development Department and in substantial conformance with this Specific Plan.

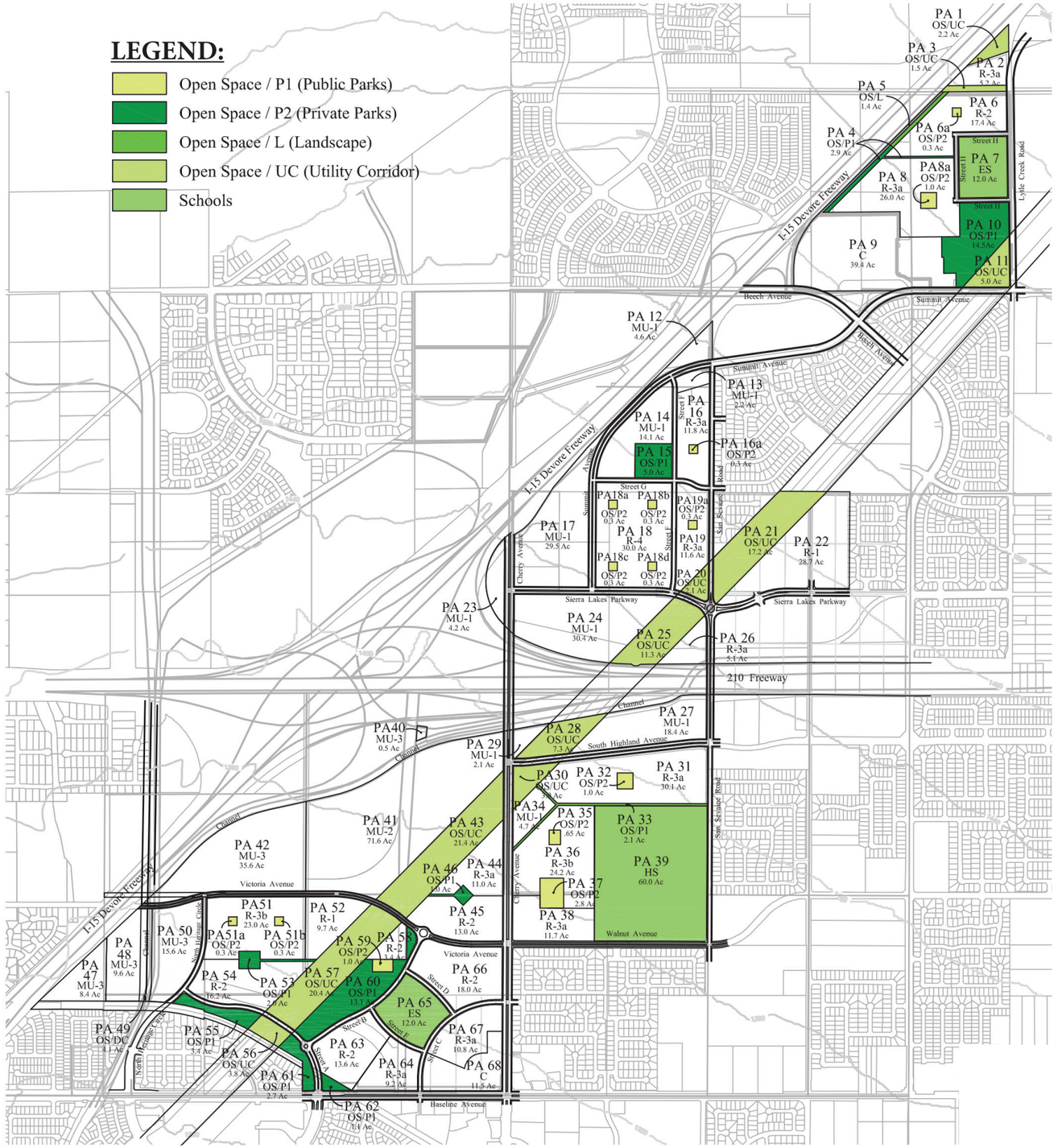
A summary of the facilities to be included in the various parks and recreation areas within the four villages is provided below.

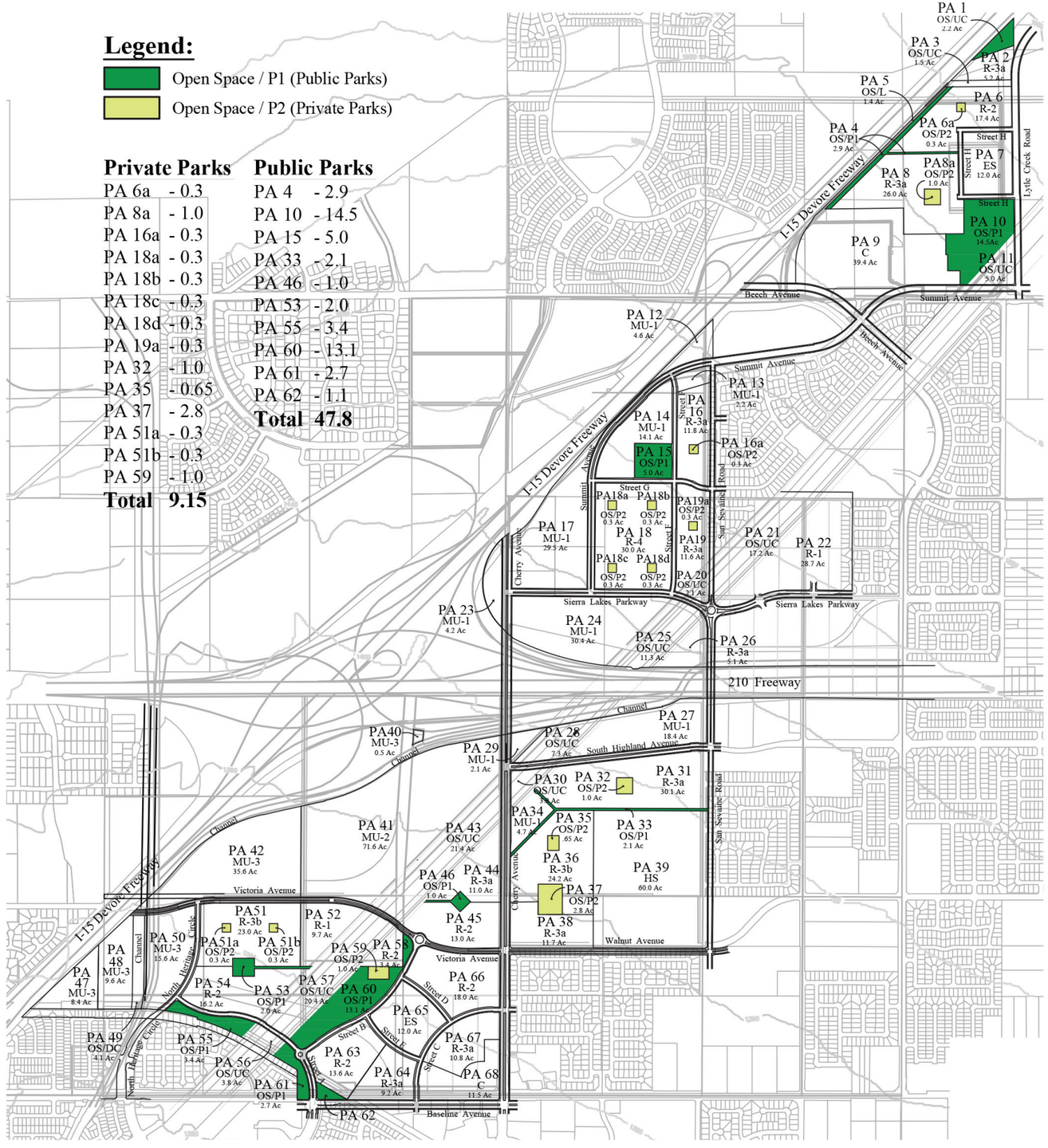
i) Falcon Ridge Village

Falcon Ridge Village includes 18.7 acres of public and private parks including a large sports park, a park with an exercise course, and two private recreation areas as follows:

- A 14.5-acre sports park would provide a large park amenity for Falcon Ridge Village as well as other Westgate villages and nearby Fontana neighborhoods. It is also designed to complement the adjacent Fontana Park and Jesse Turner Community Center.
- Two private parks totaling 1.3 acres, one of which includes a pool facility, are centrally located near the planned homes and are linked together with a paseo.

A 2.9-acre park with a walking/jogging path, benches, barbeques, picnic tables and an exercise course is located along the western edge of the village adjacent to a 1.4-acre landscape buffer area along the I-15 freeway (Planning Area 5). Including the 1.4 acres of buffer area in Planning Area 5, a combined total of 3.8 acres of buffer area would occur between the freeway and planned homes


LEGEND:
Open Space / P1 (Public Parks)
Open Space / P2 (Private Parks)
Open Space / L (Landscape)
Open Space / UC (Utility Corridor)
Schools
PA 1 OS/UC 2.2 Ac
PA 2 R-3a 5.2 Ac
PA 3 OS/UC 1.5 Ac
PA 4 OS/P1 2.9 Ac
PA 5 OS/L 1.4 Ac
PA 6 R-2 17.4 Ac
PA 6a OS/P2 0.3 Ac
PA 7 ES 12.0 Ac
PA 8 R-3a 26.0 Ac
PA8a OS/P2 1.0 Ac
PA 9 C 39.4 Ac
PA 10 OS/P1 14.5Ac
PA 11 OS/UC 5.0 Ac
PA 12 MU-1 4.6 Ac
PA 13 MU-1 2.2 Ac
PA 14 MU-1 14.1 Ac
PA 15 OS/P1 5.0 Ac
PA 16 R-3a 11.8 Ac
PA 16a OS/P2 0.3 Ac
PA 17 MU-1 29.5 Ac
PA 18 R-4 30.0 Ac
PA18a OS/P2 0.3 Ac
PA18b OS/P2 0.3 Ac
PA18c OS/P2 0.3 Ac
PA18d OS/P2 0.3 Ac
PA19 R-3a 11.6 Ac
PA19a OS/P2 0.3 Ac
PA 20 OS/UC 1.4 Ac
PA 21 OS/UC 17.2 Ac
PA 22 R-1 28.7 Ac
PA 23 MU-1 4.2 Ac
PA 24 MU-1 30.4 Ac
PA 25 OS/UC 11.3 Ac
PA 26 R-3a 5.1 Ac
PA 27 MU-1 18.4 Ac
PA 28 OS/UC 7.3 Ac
PA 29 MU-1 2.1 Ac
PA40 MU-3 0.5 Ac
PA 30 OS/UC 0.6 Ac
PA 31 R-3a 30.1 Ac
PA 32 OS/P2 1.0 Ac
PA34 MU-1 4.7 Ac
PA 35 OS/P2 .65 Ac
PA 33 OS/P1 2.1 Ac
PA 36 R-3b 24.2 Ac
PA 37 OS/P2 2.8 Ac
PA 38 R-3a 11.7 Ac
PA 39 HS 60.0 Ac
PA 41 MU-2 71.6 Ac
PA 42 MU-3 35.6 Ac
PA 43 OS/UC 21.4 Ac
PA 44 R-3a 11.0 Ac
PA 45 R-2 13.0 Ac
PA 46 OS/P1 .60 Ac
PA 47 MU-3 8.4 Ac
PA 48 MU-3 9.6 Ac
PA 49 OS/DC 4.1 Ac
PA 50 MU-3 15.6 Ac
PA51 R-3b 23.0 Ac
PA51a OS/P2 0.3 Ac
PA 51b OS/P2 0.3 Ac
PA 52 R-1 9.7 Ac
PA 53 OS/P1 2.6 Ac
PA 54 R-2 16.2 Ac
PA 55 OS/P1 3.4 Ac
PA 56 OS/UC 3.8 Ac
PA 57 OS/UC 20.4 Ac
PA 58 R-2 3.1 Ac
PA 59 OS/P2 1.0 Ac
PA 60 OS/P1 11.1 Ac
PA 61 OS/P1 2.7 Ac
PA 62 OS/P1 0.4 Ac
PA 63 R-2 13.6 Ac
PA 64 R-3a 9.2 Ac
PA 65 ES 12.0 Ac
PA 66 R-2 18.0 Ac
PA 67 R-3a 10.8 Ac
PA 68 C 11.5 Ac
I-15 Devore Freeway
210 Freeway
Beech Avenue
Summit Avenue
Lytle Creek Road
Cherry Avenue
San Sevaine Road
Sierra Lakes Parkway
South Highland Avenue
Victoria Avenue
Walnut Avenue
Baseline Avenue
Channel
North Hermosa Creek
Street A
Street B
Street C
Street D
Street E
Street F
Street G
Street H
Street H1



N

PCR

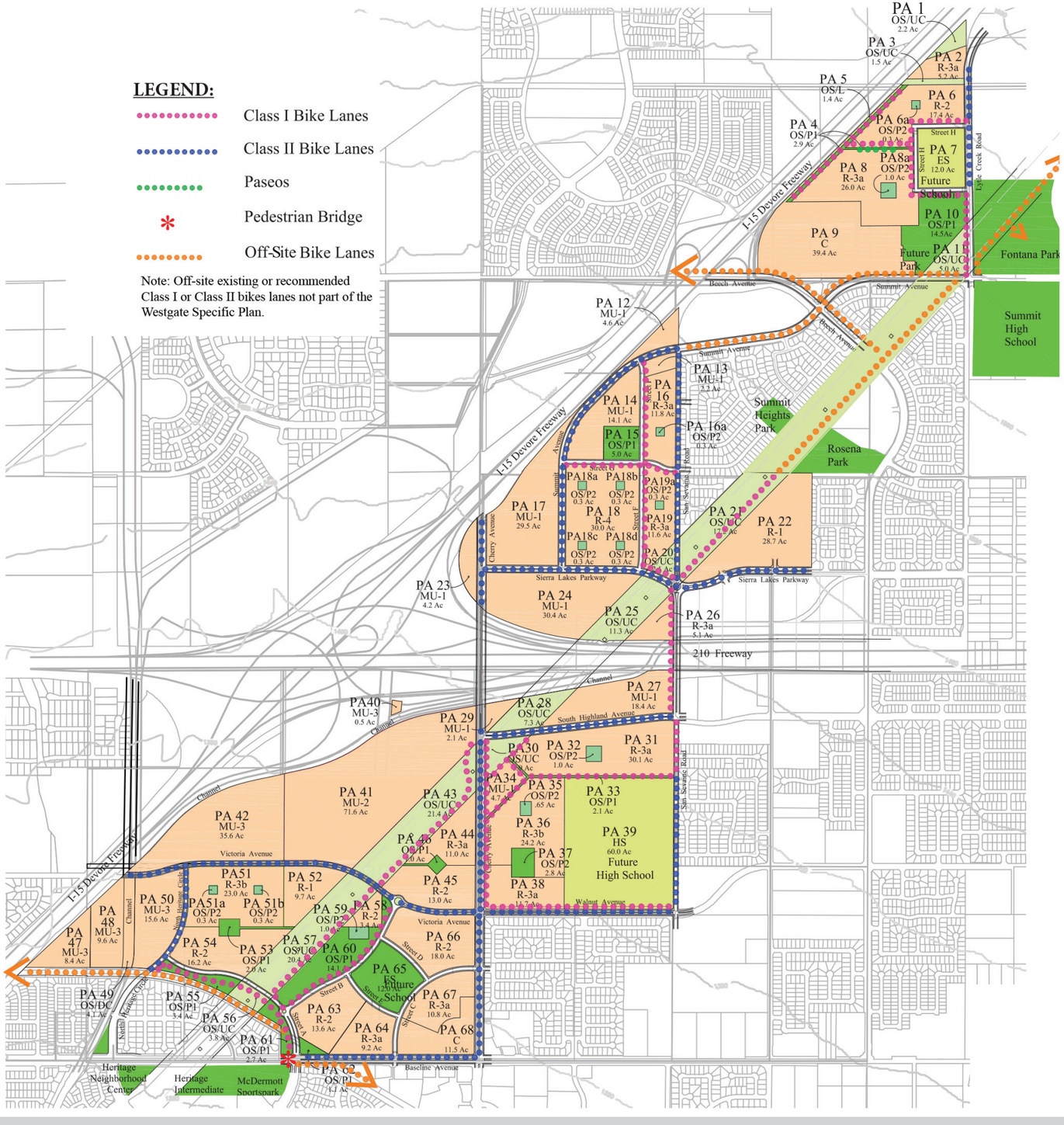
Public and Private Parks

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-14


LEGEND:
Class I Bike Lanes
Class II Bike Lanes
Paseos
Pedestrian Bridge
Off-Site Bike Lanes
Note: Off-site existing or recommended Class I or Class II bikes lanes not part of the Westgate Specific Plan.
PA 1 OS/UC 2.2 Ac
PA 2 R-3a 5.2 Ac
PA 3 OS/UC 1.5 Ac
PA 4 OS/P1 2.9 Ac
PA 5 OS/L 1.4 Ac
PA 6 R-2 17.4 Ac
PA 6a OS/P2 0.3 Ac
PA 7 ES 12.0 Ac Future School
PA 8 R-3a 26.0 Ac
PA8a OS/P2 1.0 Ac
PA 9 C 39.4 Ac
PA 10 OS/P1 14.5 Ac
PA 11 OS/UC 5.0 Ac
Future Park
Fontana Park
Summit High School
I-15 Devore Freeway
Beech Avenue
Summit Avenue
Eighth Street
Eighth Street
Eighth Street

This page is intentionally blank.

within Falcon Ridge Village. A walking/jogging path/bike path would connect to the 14.5-acre park site and two private parks.

ii) Westgate Center

As shown in Figures 2-13 and 2-14, Westgate Center would include multiple park and recreation areas. In addition to six private parks of 0.3 acres, each with pools, a centrally located five-acre public park is planned with a multi-use field, two tennis courts, two basketball courts, sand or paved volleyball courts, a picnic/BBQ area, turf amphitheater, and restroom building.

iii) Westgate Village

Westgate Village includes 23.3 acres of public parks and 1.3 acres of private recreation areas. The major community gathering and focal point of the Village is a 13-acre community park with a lake, lighted tennis and basketball courts, a dog park, restrooms, picnic shelters, among other amenities discussed below. Numerous walkways and bike paths would link the park with the larger community.

A 7,500-square-foot clubhouse is planned adjacent to the lake to serve the residents of Westgate Village. This private facility would include facilities such as exercise rooms, meeting rooms, kitchen, spa, junior Olympic and kiddie pool, all maintained by a Homeowner's Association or similar entity. The clubhouse would be designed to create an architectural icon and theme for the Westgate Village community.

Along the south portion of Westgate Village, adjacent to the SANBAG right-of-way and future regional trail, a park is planned with an exercise course, picnic tables and barbeques. The pedestrian bridge planned for The Westgate Specific Plan would provide a grade-separated access into the park and regional trail across Baseline Avenue.

iv) Westgate Village East

Four parks would serve Westgate Village East: Three private parks, one acre, 0.65-acre and 2.8 acres in size, are planned to serve Planning Areas 32, 35 and 37, respectively, with a 2.1-acre public recreation corridor centrally located within planning area 33. A clubhouse building, swim and recreational complex are planned in the 2.8-acre park.

(b) Trails

The Westgate Specific Plan has a multi-faceted trail, bike and walkway plan that links the entire community together as well as connecting to City wide regional trails. Refer to Figure 2-15 for the Bikeways and Trails Plan.

- With five public parks and three school sites, there would be a significant number of children and adults that would be walking or bicycling within the community. In addition to the bike path in the utility corridor, a Class I (off-street) bike lane would provide residents of the four villages both pedestrian and bicycle access along landscape parkways to park and school sites.
- For those residents interested in activities beyond the four villages, Class I bike lanes provide access to City wide amenities, such as Fontana Park and Jesse Turner Center to the north. To the south, access to the Village of Heritage Community Center, McDermott Sports Park, the Heritage

Intermediate School and the City Regional trail in the SANBAG right-of-way is provided. With the high school site planned in Westgate Village East, this Class 1 bike lane would also facilitate access for many students from Heritage and neighboring communities.

- Class II bike lanes would also link the community and shall be provided on all major streets which do not include off-street bike lanes.
- A pedestrian bridge, discussed below, would enhance access across Baseline Avenue between the Village of Heritage and the Westgate Specific Plan villages.
- Sidewalks with landscaped parkways and street trees would also be provided to link the community together.

(c) Pedestrian Bridge

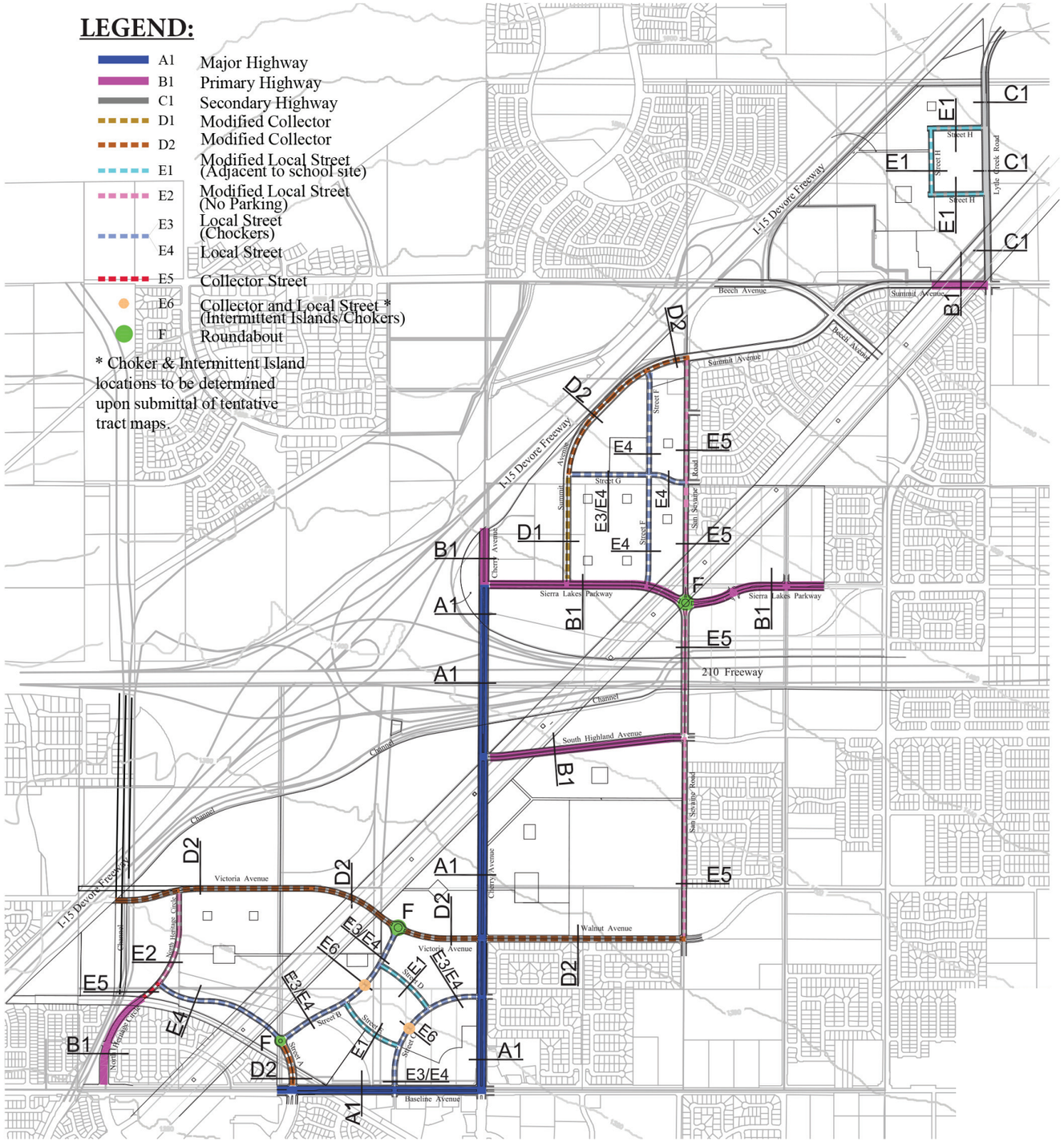
A pedestrian bridge is planned at Baseline Avenue at the primary entry to Westgate Village, as indicated above in Figure 2-15. The bridge would serve many Westgate Specific Plan and City-wide purposes, as summarized below:

- Provides a grade-separated extension of the City of Fontana regional trail within the SANBAG right-of-way across Baseline Avenue, which links Fontana to adjacent cities to the east and west. The bridge also would provide access to the City regional trail that links to Fontana Park, Jesse Turner Center and other community amenities to the north.
- Provides access for the Westgate Specific Plan residents to the Heritage Community Center, McDermott Sports Complex, Heritage Intermediate School, Heritage shopping center and nearby business in Fontana Commerce Center.
- Provides access for Village of Heritage residents to the future High School in Westgate Village East - a Class I bike lane would provide continuous off-street access to the High School from the bridge location. It would also provide access for Heritage residents to many of the Westgate Specific Plan's site amenities, such as the new lake in Westgate Village Park.

d. Site Access and Circulation

The proposed project's circulation plan, illustrated below in **Figure 2-16**, *Circulation Plan*, was prepared based upon the traffic study prepared for this Specific Plan. It identifies the major transportation corridors and street alignments required within the Specific Plan project area.

The Westgate Specific Plan project area is located adjacent to the I-15 Freeway and SR-210. The I-15 freeway major interstate transportation corridor connects San Diego with Las Vegas. It includes a High Occupancy Vehicle lane and four travel lanes in each direction. It provides excellent regional access to other nearby interstate freeways, including the SR-210, I-215, I-10 and SR-60 freeways. Access to the Westgate Specific Plan from the I-15 occurs at Baseline Avenue and Summit Avenue. The SR-210 Freeway connects from Los Angeles to the west and Redlands to the east. It has a High Occupancy Vehicle lane and four travel lanes in each direction. It also provides excellent regional access to other nearby interstate freeways, including the I-15, I-215, I-10 and I-60 Freeways. The Cherry Avenue/SR-210 interchange provides direct access into the Westgate Specific Plan.



N

PCR

Circulation Plan

Westgate Specific Plan
Source: JHA Consulting, Inc., 2014.

FIGURE
2-16

This page intentionally blank.

Local streets are not shown on the Circulation Plan and would be provided on a parcel by parcel basis when applications for development occur. The Local Street classification with a 36 feet curb-to-curb section may be restricted to cul-de-sac and short local streets (public or private) as required by the Fire Department.

The Local Street classification of 40 feet wide curb-to-curb shall be used for local collector streets or backbone streets which exceed the above standards. In both cases, both sides of the street feature a five-foot-wide street-adjacent landscape area and a five-foot-wide sidewalk. When there is a residential rear or side yard condition and/or a community theme wall an additional ten-foot landscape easement, as measured to back of sidewalk, shall be provided. When a residential unit fronts onto a collector street no landscape easement is required.

e. Landscaping

The proposed Westgate Specific Plan provides extensive landscaping along proposed roadways throughout the Specific Plan area, as shown in **Figure 2-17a**, *Landscape Master Plan (South)*, and **Figure 2-17b**, *Landscape Master Plan (North)*. Additionally, development of the various proposed land uses within each Planning Area would be subject to the landscaping requirements provided in Section 5.0, *Community Design Guidelines*, of the proposed Specific Plan. The design guidelines prescribe the type, amount, and location of landscaping for structures, roadways, access points, and parking lots for all future development occurring within the Specific Plan area.

7. SUSTAINABILITY FEATURES

The proposed Westgate Specific Plan includes a number of sustainability features that are intended to minimize the development's impacts on the environment. Such features that the applicant has committed to implementing include the following:

SF-1: By providing jobs near housing, with retail, parks and schools within walking distance of compact residential villages, the Westgate Specific Plan residents would have less reliance on the automobile. This in turn would result in reduced vehicular emissions and an overall healthier community.

SF-2: The Westgate Specific Plan would also become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the Westgate Specific Plan would achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CalGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills and install low pollutant-emitting materials. It also requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for non-residential buildings over 10,000 square feet designed to ensure that all are working at their maximum capacity and according to their design efficiencies.

SF-3: In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape irrigation in public parks and rights of ways. The Inland Empire Utilities Agency (IEUA) is in the process of building a regional recycled water system to serve the Westgate Specific Plan and other areas in Fontana.

SF-4: The Westgate Specific Plan infrastructure plans require that a reclaimed water "purple pipe" system be installed in medians for all major streets, parkways and public parks. It would be connected to the IEUA recycled water system upon its completion.

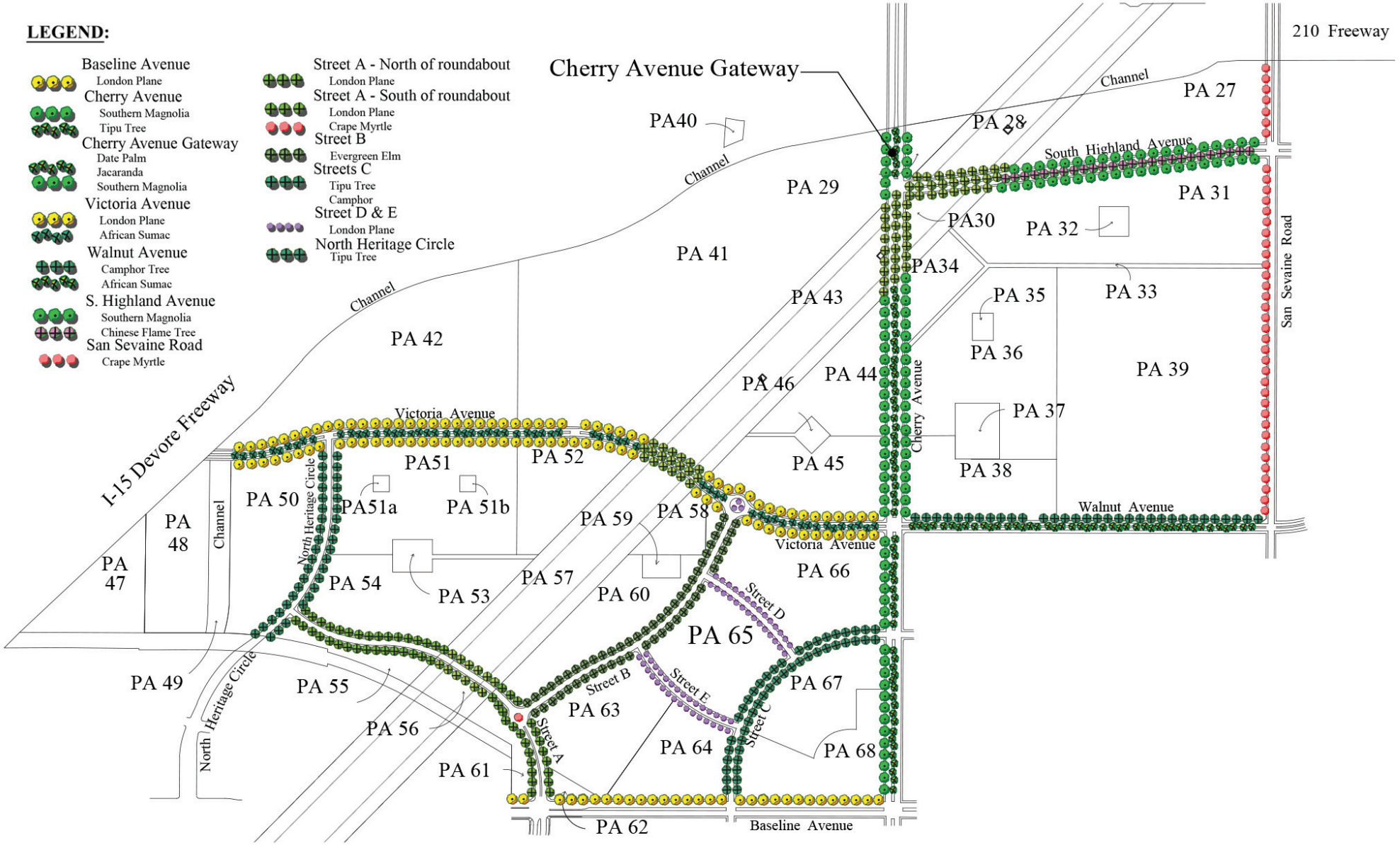
8. CONSTRUCTION SCHEDULE AND PHASING

Construction of the project would be phased in an orderly manner, with full buildout of the Specific Plan anticipated to occur by 2035. Each of the four villages may be developed concurrently or in any sequence provided that all infrastructure required to serve each area is provided to the satisfaction of the City engineering department. The timing of each area would be subject to local, regional, and national market conditions. However, the project Applicant has identified the project components to be implemented as part of the first phase of development, which is anticipated to be constructed and operational by 2018. Phase 1 development would include uses proposed within each of the four villages, which are intended to complement existing on- and off-site development and minimize the need for expanded infrastructure facilities in the short-term. A summary of uses to be developed as part of Phase 1 is provided below in **Table 2-7**, *Phase 1 Development Summary*, and illustrated in **Figure 2-18**, *Phase 1 Development Plan*.

9. NECESSARY APPROVALS

Approvals required for development of the Westgate Specific Plan Project would include, but may not be limited to, the following:

- Adoption of the new Westgate Specific Plan;
- Amendment to the City of Fontana General Plan to reflect the new Specific Plan (including amending the General Plan Land Use Map and the Circulation Element for proposed roadway classifications);
- Amendment to the City of Fontana Zoning Ordinance;
- Certification of an Environmental Impact Report; and
- Development Agreement.



PCR

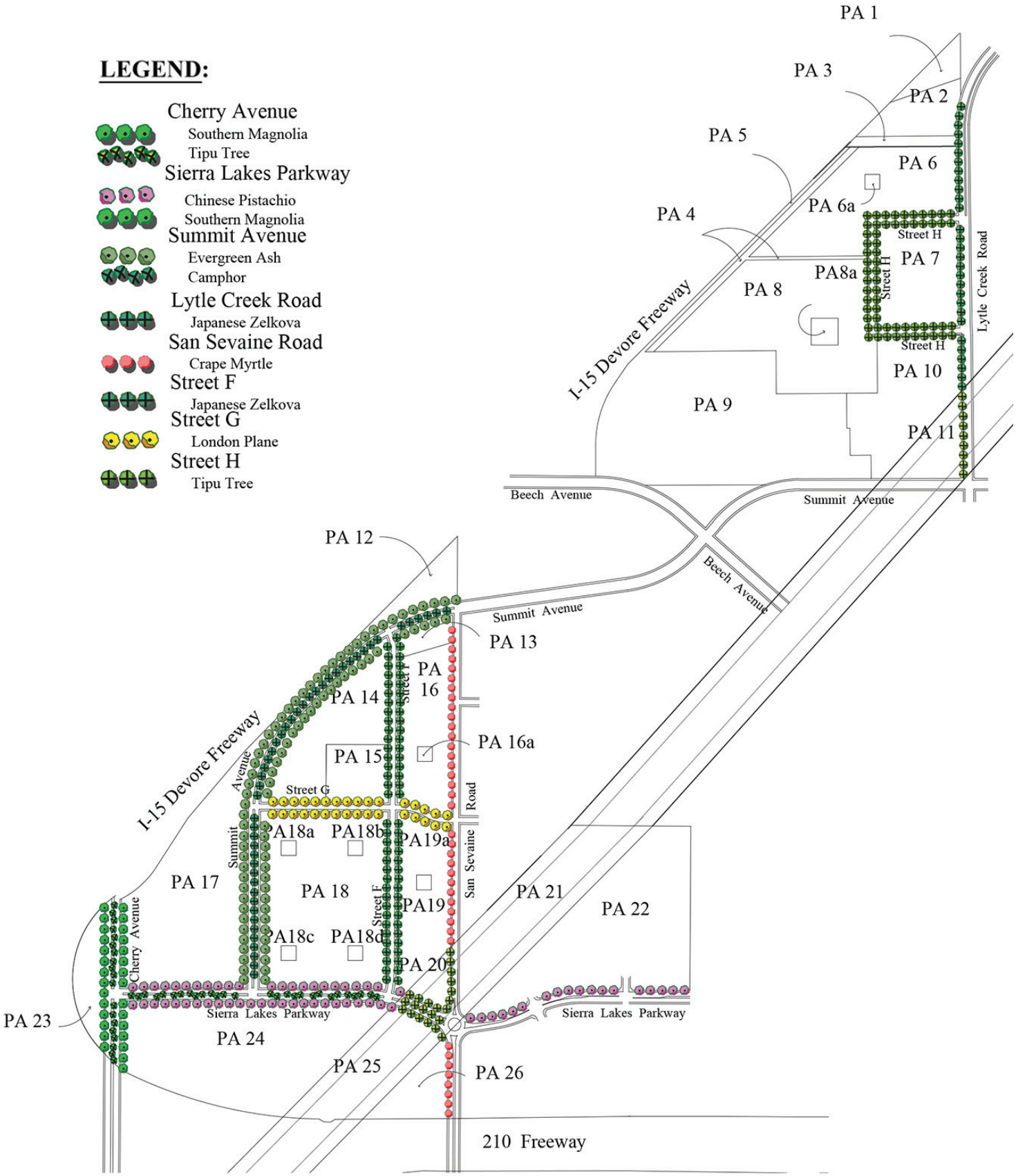
Landscape Master Plan (South)

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-17a



PCR

N

Landscape Master Plan (North)

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

2-17b

Table 2-7

Phase 1 Development Summary

Planning Area	Land Use	Acres	Density Range	Target Density	Target DU
COMMERCIAL RETAIL					
68	Commercial Retail	11.5			
BUSINESS PARK					
41	Mixed-Use 2	71.6			
RESIDENTIAL					
2	R-3a	5.2	12.1-18.0	14.0	73
6	R-2	17.4	5.1-12.0	9.0	156
8	R-3a	26.0	12.1-18.0	18.0	468
22	R-1	28.7	0-5.0	3.8	110
36	R-3b	24.2	18.1-24.0	20.5	495
38	R-3a	11.7	12.1-18.0	15.0	175
58	R-2	3.4	5.1-12.0	9.0	30
63	R-2	13.6	5.1-12.0	9.0	122
64	R-3a	9.2	12.1-18.0	15.0	138
Subtotal		***139.4***			***1,767***
PARKS/OPEN SPACE					
1	Open Space/Utility Corridor	2.2			
3	Open Space/Utility Corridor	1.5			
4	Open Space/Public Park	2.9			
5	Open Space/Landscape	1.4			
6a	Open Space/Private Park	0.3			
8a	Open Space/Private Park	1.0			
10	Open Space/Public Park	14.5			
21	Open Space/Utility Corridor	17.2			
35	Open Space/Private Park	0.65			
37	Open Space/Private Park	2.8			
56	Open Space/Utility Corridor	3.8			
57	Open Space/Utility Corridor	20.4			
59	Open Space/Private Park	1.0			
60	Open Space/Public Park	13.1			
61	Open Space/Public Park	2.7			
62	Open Space/Public Park	1.1			
Subtotal		***86.55***			
OTHER					
7	Elementary School	12.0			
TOTAL*		**321.05**			**1,767**

Source: Westgate Specific Plan, 2014

This page intentionally blank.

N

0 2000 Feet

Phase 1 Development Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2011.

FIGURE

2-18

This page is intentionally blank.

3.0 Basis for Cumulative Analysis

3.0 BASIS FOR CUMULATIVE ANALYSIS

The California Environmental Quality Act (CEQA) requires that Environmental Impact Reports (EIRs) analyze cumulative impacts. As defined in CEQA *Guidelines* 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. CEQA *Guidelines* Section 15130(a) states that an EIR must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in Section 15065(a)(3). 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 must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. However, an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR. Furthermore, when the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR must briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency must identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.

In addition, CEQA *Guidelines* Section 15130(b) indicates that the analysis of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detailed as is provided for the effects attributable to the project alone. Instead, the discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of the other projects which do not contribute to the cumulative impact.

As indicated above, "cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or compound or increase other environmental impacts." Cal. Pub. Res. Code § 21083(b); CEQA Guidelines § 15355. A project has "cumulatively considerable" impacts when its incremental effects "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. Cal. Pub. Res. Code § 21083(b); see also CEQA *Guidelines* § 15355(b).

For an adequate discussion of significant cumulative impacts, the CEQA *Guidelines* (Section 15130(b)(1)(A) and (B)) allow an environmental impact report to determine cumulative impacts and reasonably foreseeable growth based on either of the following methods:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

For the purposes of the cumulative impacts analysis for the proposed project, the City has opted to use both the list approach and the growth projections approach, as applicable, for evaluating cumulative effects. The list of “related projects” was developed by the City by reviewing the most current list of approved projects in the City’s project status database. Projects identified within the general of the project site were confirmed by City staff to be current or probable future developments with the potential to contribute to cumulative effects in conjunction with the proposed project given their proximity and anticipated development

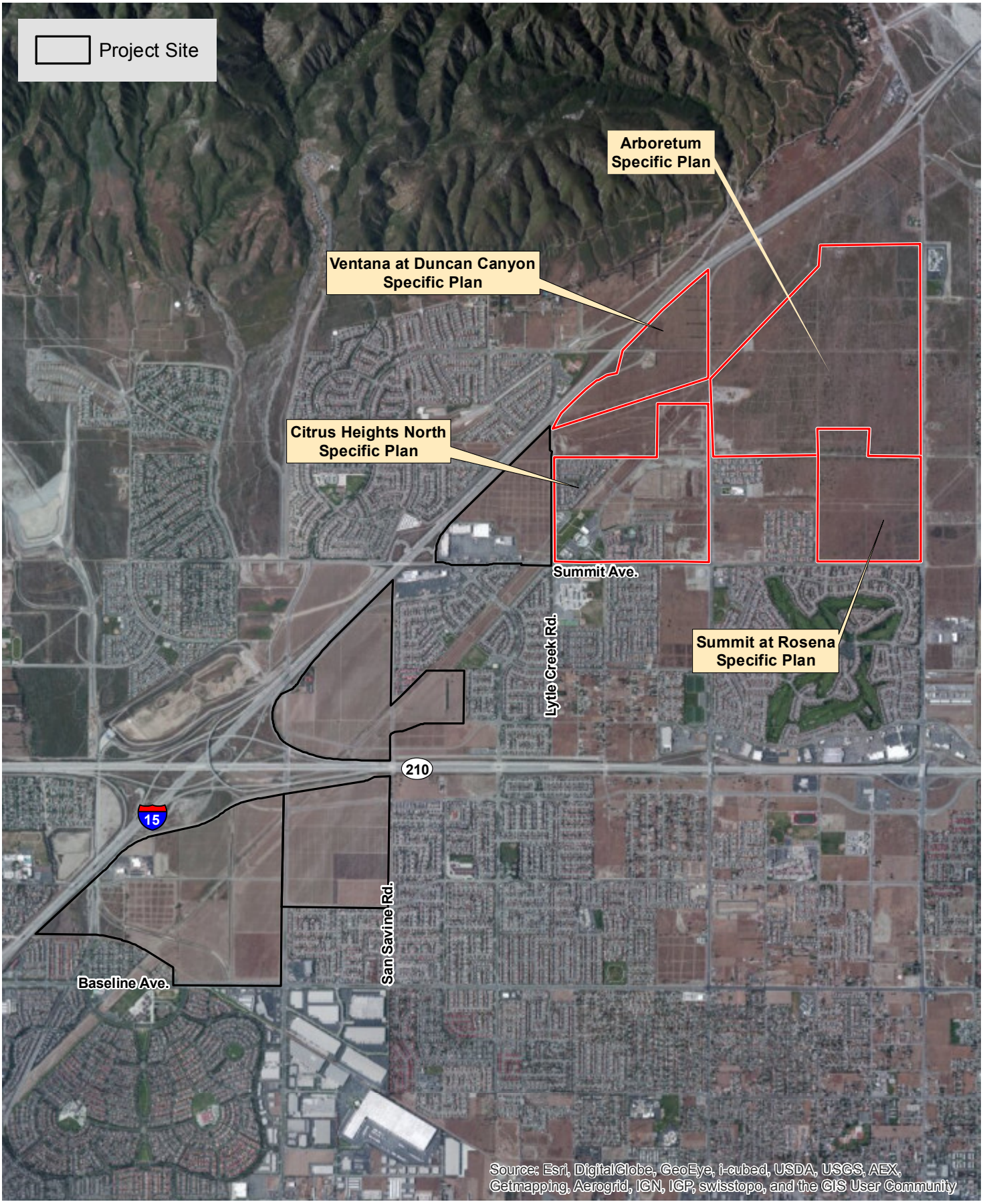
intensity. The City identified four (4) of these projects, which are summarized in **Table 3-1**, *Related Projects List*, below, while the locations of each of the related projects are illustrated in **Figure 3-1**, *Related Projects Map*. Additionally, cumulative development statistics, which include the proposed Westgate Specific Plan, are provided below in **Table 3-2**, *Cumulative Development Summary*.

Table 3-1

Related Projects List

Map No.	Project Name	Description
1	Arboretum Specific Plan	Approved by the City Council on September 23, 2009, on 317 acres for 3,526 residential units, two (2) elementary schools (46 ac), 31 acres of parks and 8.8 acre community commercial center. (No construction or land use entitlement applications approved)
2	Ventana Specific Plan	Approved by the City Council on April 10, 2007, on 104.8 acres for 842 residential condominium units, 211,570 square feet of retail commercial, and 362,930 square feet of office/light manufacturing/research and development uses. (No construction or land use entitlement applications approved)
3	Summit at Rosena Specific Plan	Approved by the City Council on March 22, 2006, on 179.8 acres for 856 single-family attached and detached units, 22 acres of parks, a 12-acre elementary school, and a one-acre community commercial activity center.
4	Citrus Heights North Specific Plan	Approved by the City Council on August 17, 2004, on 212 acres for 1,154 residential units (606 single-family lots, and 548 multi-family lots) and a nine-acre sports center. (Approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed).

Source: City of Fontana Development Services Organization, 2012.



PCR

N

0 0.5 1 Miles

Related Projects Map

Westgate Specific Plan

Source: Aerial Express, 2010; PCR Services Corporation, 2012.

FIGURE

3-1

This page is intentionally blank.

Table 3-2

Cumulative Development Summary

Related Project	Residential (units)	Office (acres)	Retail (acres)	Industrial (acres)	School (acres)
Arboretum Specific Plan	3,526	-	8.8	-	46.0
Ventana Specific Plan	842	8.3	4.9	-	-
Summit at Rosena Specific Plan	856	-	1.0	-	12.0
Citrus Heights North Specific Plan	530[a]	-	-	-	-
Subtotal Related Projects	*5,754*	*8.3*	*14.7*	*0.0*	*58.0*
Proposed Project	***5,931***	***155.2***	***15.2***	***23.6***	***84.0***
TOTAL	**11,685**	**163.5**	**29.9**	**23.6**	**142.0**

[a] *The Citrus Heights North Specific Plan was approved for a total of 1,154 residential units (606 single-family and 548 multi-family); however, approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed, resulting in 530 units yet to be constructed.*

Source: PCR Services Corporation, 2014

Although the projects listed above serve as the primary bases for evaluation of cumulative impacts, the approach to these analyses vary for certain environmental issues. According to CEQA *Guidelines* Section 15130 (b)(3), the City established a general geographic scope of the area affected by the potential cumulative effects based on the potential for the proposed project and related projects to contribute impacts within a particular distance from the project site, jurisdiction, viewshed, watershed, air basin, service area, or other geography, as applicable. The specific geographic scope for each environmental issue analyzed in this EIR is provided below.

- The scope for cumulative analysis of impacts related to aesthetics and views is the viewshed surrounding the project site, as only those projects that can be viewed in the context of the proposed project could contribute to cumulative visual effects.
- With regard to air quality and global climate change effects, the geographic scope of cumulative effects is the South Coast Air Basin, since all regional air emissions from development within the area occur within the Basin.
- The cumulative analysis of effects on biological resources considers species and habitats within a specific geographic area in which one would expect to find such resources, in this case the southwestern portion of San Bernardino County.
- The geographic scope for archaeological and paleontological resources is the southern California region, based on the historic extent of Native American settlements and the wide distribution of fossil-bearing geologic formations in the region.
- Cumulative historic resources impacts are evaluated in the context of local, State, and national significance, as historic resources can be considered significant at each of these levels; however, cumulative impacts are generally evaluated in terms of whether or not impacts would contribute directly or indirectly to cumulative effects on resources eligible for listing on the California or National registers.

- Geology and soils effects are limited to localized impacts on each individual development, and therefore cumulative effects are evaluated based on the overall risks to people or structures within the seismically active southern California region.
- Cumulative impacts related to hazards and hazardous materials are evaluated in the context of the larger metropolitan area in which cumulative development occurs, which includes the southwestern portion of San Bernardino County and Inland Empire as a whole.
- Cumulative effects related to hydrology and water quality are limited to the watershed within which a project is located, and therefore the geographic scope for cumulative analysis is the Santa Ana River watershed.
- Land use and planning impacts generally affect the jurisdiction in which projects are located, and therefore the geographic context for cumulative analysis is the City of Fontana, County of San Bernardino, and the southern California region (Southern California Association of Governments jurisdiction).
- Noise effects are by nature localized, and therefore potential cumulative noise impacts are analyzed for those identified related projects in close enough proximity to the project site to increase noise levels on-site. Cumulative population, housing, and employment impacts are assessed for all development within the southern California region (i.e., SCAG jurisdiction).
- The cumulative analysis context for population and housing impacts relate to the geographies identified in regional growth management plans (such as the 2012-2035 SCAG RTP/SCS), which include the City of Fontana, County of San Bernardino, and entire SCAG Region.
- The geographic scope for cumulative effects on public services and utilities (including police, fire, schools, parks/recreation, libraries, water, wastewater, and solid waste) are limited to each respective service area.
- The geographic context for cumulative traffic and circulation impacts is the area within which related projects could contribute 50 or more peak hour trips to the street network serving the project site. In addition, the average daily traffic volume forecasts for future conditions were determined using the growth increment approach for the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 average daily traffic volume forecasts. This difference defines the growth in traffic over the 27-year period of Specific Plan buildout. The incremental growth in average daily traffic volume was factored to reflect the forecast growth between Year 2013 and Year 2035. For this reason, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2013 and Year 2035 is 22 years of the 27-year timeframe between 2008 and 2035, a factor of 0.81 (i.e., 22/27) was used, which accounts for ambient growth in the area over that period.

The cumulative analysis of each environmental issue, are identified in the applicable environmental issue section in Chapter 4, *Environmental Impact Analysis*, of this EIR.

4.0 Environmental Impact Analysis

4.0 ENVIRONMENTAL IMPACT ANALYSIS
A. AESTHETICS/VISUAL RESOURCES

1. INTRODUCTION

This section addresses the potential aesthetic and visual resources impacts that could result from the proposed project with regard to visual quality, views, and light and glare. The analysis presented in this section is based on a review of applicable plans and regulations, including the City of Fontana General Plan (General Plan) and Fontana Municipal Code (FMC), site reconnaissance by PCR staff, as well as the analysis and conclusions presented in the General Plan Environmental Impact Report (General Plan EIR).

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Visual Character

(a) Project Site

(i) Views of the Project Site

Views of the project site from various locations are shown in **Figures 4.A-2** through **4.A-5**, below, while view locations are illustrated below in **Figure 4.A-1**, *Photograph Location Map*. Views of project site are dominated by vacant land and former vineyards with little urban development, aside from the existing Falcon Ridge Shopping Center, Caltrans Transportation Management Facility and Regional Lab, and one multi-tenant office building. However, raised highway corridors (I-15 and SR-210) and high voltage electrical transmission lines/towers are also prominent visual features within the project site. Additionally, various concrete-lined and unlined operational and former stormwater drainage channels also traverse or abut the Specific Plan area. Because the project site, with the exception of developed portions of the Specific Plan area such as the Falcon Ridge Town Center and Caltrans Southern Regional Lab, lacks notable scenic features such as natural landforms or vegetation, urban development with consistent design elements, landscaping, or other visually pleasing characteristics, the visual quality of the site is considered relatively low. The project site does not contain any scenic resources.

(ii) Views Across the Project Site

Individual views across the project site from within and surrounding the project site are illustrated in Figures 4.A-1 through 4.A-4. As shown in **Figure 4.A-1**, *Views to the North*, views northward from throughout the project area are characterized by vacant land/vineyards, low-scale urban development, freeway corridors, and power lines/towers, but are dominated by the San Gabriel Mountains. Specifically, views from Baseline Avenue include foreground views of vacant land, former stormwater drainage channels, mid-distance views of the 210 and 15 freeways and power lines/towers, and long-distance views of residential development at the foot of the San Gabriel Mountains and the mountain range itself. Similarly, views northward from SR-210 are characterized by foreground views of vacant land, mid-distance views of existing urban development and power lines/towers, and long-distance views of the San Gabriel Mountains and residential uses on the foothills.

Figure 4.A-2, *Views to the East*, illustrates existing views to the east across the project area. As shown in Figure 4.A-2, views eastward across the project site are characterized by foreground views of vacant land and former vineyards, except adjacent to the Falcon Ridge Shopping Center, Caltrans facility, or existing office use, where existing structures and landscaping would dominate foreground views. Mid-distance views include existing residential and commercial development and power lines/towers, while long-distance views are dominated by the San Gabriel Mountains and more distant San Bernardino Mountains.

Views to the south from within and around the Specific Plan area are provided in **Figure 4.A-3**, *Views to the South*, below. Foreground views are characterized by vacant land and former vineyards, and to a limited extent stormwater drainage channels, while mid-distance views include raised freeway corridors, power lines/towers, and existing urban development. Long-distance views are dominated by the Jurupa Hills and more distant Santa Ana Mountains.

Figure 4.A-4, *Views to the West*, shows existing views across the project site from locations in the eastern portion of the Specific Plan area. As illustrated in Figure 4.A-4, foreground views to the west are dominated by vacant land, former vineyards and a handful of stormwater drainage features. Mid-distance views are characterized predominantly by existing urban development, roadways and raised freeway corridors, and power lines/towers. Long-distance views are more limited given the distance to prominent topographic or urban features, but include the northwestern end of the Santa Ana Mountains, foothills of the San Gabriel Mountains, and to a lesser extent the southeastern terminus of the Puente Hills.

(b) Visual Character of the Surrounding Area

The project area is located within a mostly undeveloped portion of the City of Fontana, and is generally bounded by I-15 to the west and north, and by existing urban development to the east and south. As noted previously, the freeway corridors are raised features and therefore generally preclude views of urban development to the west of I-15 within the City of Rancho Cucamonga. However, adjacent off-site development to the east and south of the project boundary is plainly visible from throughout the Specific Plan area. Surrounding development is characterized by low-rise development (up to two stories in height) and associated landscaping, composed mainly of wood-frame, single-family residential structures with Mediterranean and craftsman architectural styles with stucco exterior surfaces and clay roofing tile, and wood panel siding and synthetic shingle roofs, respectively. Additionally, several commercial developments with structural heights up to two stories are located within and adjacent to the Specific Plan area, which are characterized by concrete and stucco exteriors and clay tile roofing, and include extensive landscaping within the developments and along their street frontages. Two-story office buildings are located at the southeast corner of Baseline Avenue and Cherry Avenue, which are rectangular structures of tilt-up concrete construction with large expanses of mirrored windows and landscaping throughout parking areas and within front street setbacks.

PCR

N

0 2,000 4,000 Feet

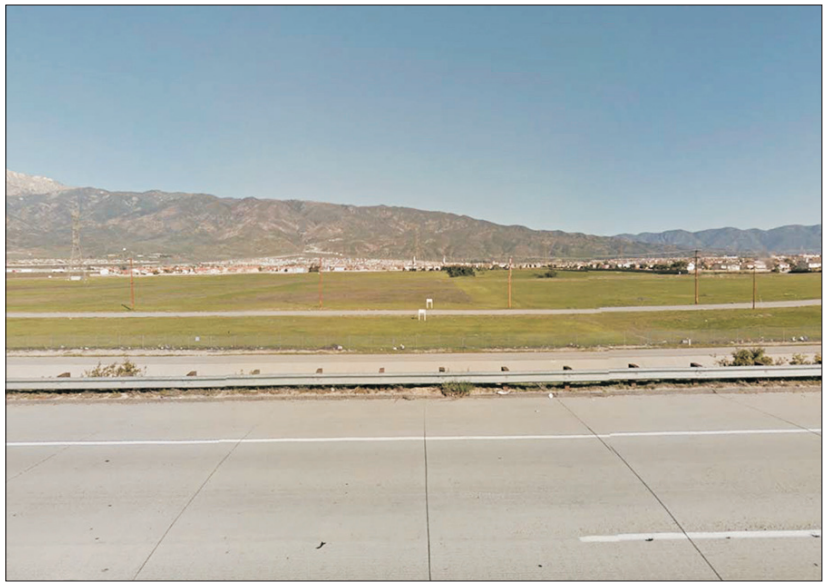
Photograph Location Map

Westgate Specific Plan

Source: Aerial Express, 2010; PCR Services Corporation, 2012.

FIGURE

4.A-1



Photograph 1: 210 at Hemlock north view.

Photograph 2: Baseline at Almond north view.

Photograph 3: Baseline west of Cherry north view.

Photograph 4: Lytle Creek north of Summit northwest view.

PCR

Views to the North

Westgate Specific Plan

Source: PCR Services Corporation, 2012.

FIGURE

4.A-2

Photograph 5: I-15 at 210 east-southeast view.

Photograph 6: I-15 north of Summit east view.

Photograph 7: Cherry at north Frontage Road east view.

Photograph 8: Victoria east of I-15 east-northeast view.

PCR

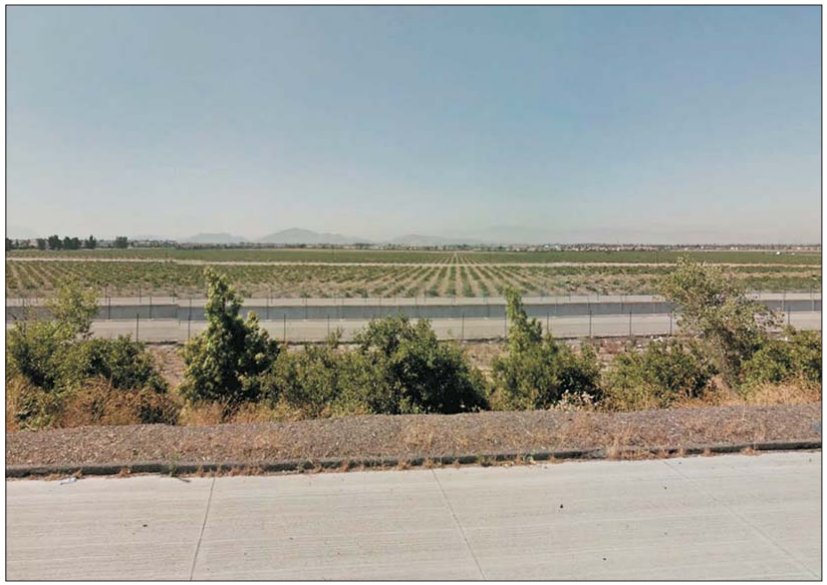
Views to the East

Westgate Specific Plan

Source: PCR Services Corporation, 2012.

FIGURE

4.A-3



Photograph 9: 210 west of San Sevaine south view.

Photograph 10: I-15 at 210 south view.

Photograph 11: Lytle Creek Road at north Project Boundary southwest view.

Photograph 12: Summit west of San Sevaine south view.

PCR

Views to the South

Westgate Specific Plan

Source: PCR Services Corporation, 2012.

FIGURE

4.A-4

Photograph 13: Cherry at Walnut west view.

Photograph 14: Summit at San Sevaine southwest view.

Photograph 15: Lytle Creek at Toscana west view.

Photograph 16: Sierra Lakes west of Beech west view.

PCR

Views to the West

Westgate Specific Plan

Source: PCR Services Corporation, 2012.

FIGURE

4.A-5

This page is intentionally blank,

(2) View Resources

(a) Scenic Routes

The State Scenic Highway System includes a list of highways that are either currently designated as scenic highways by the State or are eligible for that designation. Neither Caltrans nor the County of San Bernardino identifies any designated or eligible scenic highways within, or in the immediate vicinity of, the project site.

(b) Scenic Vistas

A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed. Scenic vistas may also be represented by a particular distant view that provides visual relief from less attractive views of nearby features. Other designated federal and state lands, as well as local open space or recreational areas, may also offer scenic vistas if they represent a valued aesthetic view within the surrounding landscape.

In most parts of the project site, foreground and mid-distance views have limited scenic value. However, the long-distance background viewshed, particularly to the north, is dominant and represents a valued scenic vista. The City's General Plan notes that the City is surrounded by a significant amount of visible open space, including the San Gabriel Mountains and San Bernardino Mountains, which are located to the north of the Specific Plan area. The City's General Plan designates these mountains as one of the City's most important scenic resources, and as such they are considered a dominant, dramatic scenic feature for the project site. The Jurupa Hills and Santa Ana Mountains are also visible to the south, although at a much greater distance than the San Gabriel and San Bernardino Mountains. Scenic vistas are therefore part of what distinguishes the project area, particularly its northernmost portions.

(c) View Corridors

The Community Design Element of the City's General Plan identifies a total of eight view corridors within the City. Three of these corridors occur along major north-south roadways within the City, three occur along major east-west thoroughfares, and two along I-15 and SR-210. A total of five of the City's view corridors occur either within or adjacent to the project site, including Cherry Avenue, Baseline Avenue, Highland Avenue, I-15, and SR-210. The Cherry Avenue, I-15, and SR-210 corridors provide unobstructed views of visual resources such as the San Gabriel and San Bernardino Mountains to the north, and the Jurupa Hills to the south, while the Baseline Avenue and Highland Avenue corridors provide views of visual resources including the San Bernardino Mountains to the east.

To visually enhance these corridors, the General Plan recommends various design guidelines that include: creating spacious view corridors; developing architectural design guidelines for industrial and commercial uses constructed within the corridor areas; and the incorporation of community design themes, unique streetscape identity, and installation of landscaping enhancements at strategic locations along the roadways. The identified view corridors along Baseline Avenue, Highland Avenue, and Cherry Avenue enhance the visual tie-in between the project site and the San Gabriel/San Bernardino Mountains viewshed and associated scenic vistas.

(3) Light and Glare

Existing nighttime lighting within the project vicinity consists of light emanating from commercial buildings, illuminated building identification signs, streetlights, vehicle lights, and surface parking lot lights that occur within existing on- and off-site developments. Streetlights, vehicle headlamps, business signs, and light from building windows also contribute to ambient night lighting in the project area. Nighttime illumination is lowest in the area's residential neighborhoods and undeveloped portions such as the on-site vacant land and former vineyards, and highest along the I-15 and SR-210 corridors and within commercial retail developments. Sensitive uses with respect to artificial or nighttime light and glare in the project vicinity are the residential neighborhoods located to south and east of the Specific Plan area.

Daytime glare is generally associated with sunlight reflected from buildings with large continuous expanses of highly reflective materials. Activities that would be sensitive to daytime glare from reflected sunlight include motorists traveling on the adjacent roadways and people working in adjacent buildings. No free-standing, illuminated signage or unusual high intensity lighting that would potentially generate significant glare occurs on or near the project site. Some reflectivity from existing buildings occurs in association with existing development in the area; however, no glare that interferes with driving conditions has been observed during field inspections of the area. Nonetheless, given the proximity and elevated nature of the I-15 and SR-210 corridors in the project area, a limited potential exists during some seasons for reflected afternoon glare from the facades of existing buildings along these highways.

b. Regulatory Framework

(1) Fontana General Plan

The organizing principle of the Community Design Element of the City's General Plan is that community design exists at various levels, from the scale of an individual project to that of the entire community. In between, districts and neighborhoods become visually distinct sub-areas yet still tied to the City. The Community Design Element is intended to achieve a sense of place at the multiple scales at which the community functions through its goals, policies, and actions.

(2) City of Fontana Municipal Code

Chapter 30, *Zoning and Development Code*, of the City of Fontana Municipal Code (FMC), includes regulations and standards pertaining to lighting. Chapter 30 outlines light shielding, placement, and intensity, as well as aesthetic design. The purpose of these standards is to minimize light pollution, glare, and spillover, conserve energy resources, and curtail the degradation of the nighttime visual environment.

3. PROJECT IMPACTS

a. Methodology

(1) Visual Quality/Character

Visual quality refers to the overall aesthetics of an area or a field of view. Aesthetic features often consist of unique or prominent natural or man-made attributes or several small features that, when viewed together, create a whole that is visually interesting or appealing. The focus of the visual quality analysis is on the loss of aesthetic features or the introduction of contrasting features that could degrade the visual character of the

project area. The evaluation of visual quality pertains to the degree and nature of contrast between the proposed project and its surroundings. Existing visual quality on the project site and in the project area is compared to the expected appearance of the site in order to determine whether the visual character of the area would be degraded. Factors such as changes in the appearance of the project site, building height and massing, setbacks, landscape buffers and other features are taken into account.

(2) Views

The analysis of views focuses on the extent to which a project would interfere with visual access to visual resources from a vantage point or corridor. "Focal views" consist of views of a particular object, scene, setting, or feature of visual interest; "panoramic views" or vistas consist of views of a large geographic area for which the view may be wide and extend into the distance. Structures and other elements constructed or added to a project may obstruct focal or panoramic views. The State of California and the City of Fontana have recognized the value of access to visual resources through planning and zoning regulations that designate, preserve, and enhance public views. Through the designation of scenic resources and various land use plans, the City specifies development standards that help prevent the obstruction of views. These standards include the regulation of building height and mass, which are principal issues regarding view obstruction.

A viewshed is an area that can be seen from a given vantage point and viewing direction. A viewshed is composed of foreground items (items closer to the viewer) that are seen in detail and background items (items at some distance from the viewer) that frame the view. The intent of the evaluation of viewsheds is to determine if valued visual resources exist and whether valued visual resources would be blocked or diminished as a result of project development based on the anticipated maximum structural heights, setbacks, and development density. The evaluation further considers whether the project would enhance viewing conditions through the creation of new resources and whether the proposed project includes design features that would offset or mitigate specific impacts.

Analysis of project impacts to visual resources includes analysis of views from such public places as designated scenic highways, corridors, parkways, roadways, bike paths and trails. A viewing location must include views of scenic resources that are available to the public. Under CEQA, an office building or private residence would not be considered a viewing location since views of broad horizons, aesthetic structures, and other scenic resources would not be available to the public. In addition, the California courts have routinely held that "obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact." (*Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*, 139 Cal. App. 4th 249, 279 [2006]).

(3) Light and Glare

Artificial light impacts are typically associated with light that occurs during the evening and nighttime hours, and may include streetlights, illuminated signage, vehicle headlights, and other point sources. Uses such as residences and hotels are considered light-sensitive since they are typically occupied by persons who have an expectation of privacy during evening hours and who are subject to disturbance by bright light sources. The analysis of lighting impacts focuses on whether the project would cause or substantially increase lighting effects on light-sensitive uses.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Glare generation is typically related to sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light sensitive land use. The analysis of glare focuses on whether glare effects would interfere with off-site activities.

The analysis of light and glare identifies the location of light-sensitive land uses and describes the existing ambient conditions on the project site and in the project vicinity. The analysis describes the project's proposed light and glare sources, and the extent to which project lighting, including illuminated signage, would spill off the project site onto light-sensitive areas. The analysis also describes the affected street frontages, the direction in which the light would be focused, and the extent to which the project would illuminate sensitive land uses. The analysis also considers the potential for sunlight to reflect off building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles or other activities.

(4) Consistency with Regulatory Framework

The evaluation of aesthetic resources also compares the project to the standards and policies set forth in existing plans. These include the applicable goals and policies of the Community Design Element of the City's General Plan and lighting requirements of the City's Municipal Code.

b. Significance Thresholds

(1) Visual Character and Aesthetics

Appendix G of the *CEQA Guidelines* contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix A of this EIR. The Initial Study Environmental Checklist questions relating to aesthetics have been utilized as the thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would result in one or more of the following:

Threshold 1: Have a substantial adverse effect on a scenic vista (refer to Impact Statement 4.A-1);

Threshold 2: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings or other locally recognized desirable aesthetic natural feature within a city-designated scenic highway (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 3: Substantially degrade the existing visual character or quality of the site and its surroundings (refer to Impact Statement 4.A-2); or

Threshold 4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (refer to Impact Statement 4.A-3).

c. Project Design Features

As discussed in Chapter 2, *Project Description*, of this Draft EIR, the proposed Specific Plan would allow for the future development of up to 5,410 residential units at a range of densities, approximately 51 acres of commercial retail uses, approximately 252 acres of mixed-use business park and e-commerce uses, approximately 159 acres of parks and open space, a 60-acre high school, two 12-acre elementary schools, and approximately 89 acres of roadways within the largely undeveloped 964-acre project area.[15] The Specific Plan also includes development standards and design guidelines that would provide for a consistent and compatible development pattern with unifying architectural and other design features to maximize aesthetic appeal within the project area. These development standards and design guidelines are pertinent to the proposed project's impacts to visual character, views, and light and glare, and are therefore discussed further below.

(a) Specific Plan Development Regulations

Section 4.0, Development Regulations, of the proposed Specific Plan provides standards for all development within the plan boundaries, including allowable uses, building height limits, minimum setbacks, lot size requirements, parking requirements, and wall/fence, lighting, and landscaping standards. These development standards supersede those contained in the City's Zoning and Development Code; however, where the Specific Plan is silent on a particular standard or requirement, the Zoning and Development Code applies.

(i) Building Heights and Setbacks

According to Section 4.2, Land Use Development Regulations, of the proposed Specific Plan, building heights in commercial retail developments may not exceed 35 feet, unless otherwise approved by the City Planning Commission. However, architectural features may exceed this height by up to ten feet, with higher features subject to approval by the Director of Community Development. Building setbacks for commercial retail uses range from ten to 30 feet, while minimum building separation is ten feet.

With regard to Mixed-Use districts (MU-1, MU-2, and MU-3), as summarized in Section 4.2 of the proposed Specific Plan, building heights in mixed-use developments may not exceed 60 feet, unless otherwise approved by the City Planning Commission. However, architectural features may exceed this height by up to ten feet, with higher features subject to approval by the Director of Community Development. Building setbacks for mixed-use developments range from ten to 50 feet, while minimum building separation ranges from 15 to 35 feet depending on building height.[16]

As summarized in Table 4.1, Development Regulations, in the proposed Specific Plan, residential building height limits would range from 40 to 60 feet, minimum front yard setbacks generally range from five to 20

[15] *If high density residential uses were developed within Planinng Area 24, total allowable residential units would be increased by up to 1,000 units to a total of 6,410 units, and mixed-use business park uses would be decreased by 20.0 acres to a total of approximately 231.5 acres within the Specific Plan area.*

[16] *No setbacks are required between mixed-use buildings within the MU-1, MU-2, and MU-3 land use designations.*

feet, minimum side and rear yard setbacks range from three to eight feet, and minimum building separation ranges from six to 40 feet. Maximum residential building heights are based on housing type and density, while setbacks and building separation is dependent on housing type and structural height.

Section 4.2.10, Open Space, of the proposed Specific Plan articulates the development standards within Open Space districts. For structures located within Open Space districts, lot coverage is limited to 50 percent of the total lot area, and building heights are limited to 45 feet, with 10 additional feet for architectural features, for a maximum total height of 55 feet.

(ii) Walls and Fences

Walls and fences in commercial districts may not exceed six feet in height, and all service, refuse, and storage areas must be screened with a decorative block wall with a minimum height of six feet, but not to exceed seven feet. Additionally, all types of chain link, barbed or razor wire fencing are prohibited, except chain link fences used to control access for temporary construction activities. For single-family residential uses, fences and walls up to three feet in height are permitted within the front yard setback. Specific commercial wall and fence standards are contained in Section 5.7, Community Entry Monuments, Gateway, Walls and Fence Guidelines, while residential wall and fence standards are provided in Section 5.9, Residential - Site Landscape, Wall and Fence Guidelines, of the proposed Specific Plan.

(iii) Lighting

All lighting fixtures in must be properly shielded to prevent off-site glare, and spot fixtures must be directed downward and/or upward, but not outward from the project area. Specific outdoor lighting standards are provided in Section 5.11, Outdoor Lighting Guidelines, of the proposed Specific Plan.

(iv) Landscaping

Within commercial planning areas, a minimum of 15 percent of landscape coverage is required and must include all landscape areas inside property lines, paved courtyards, plazas, and fountain areas. Landscaping must also be provided around all buildings and lot perimeters, within parking areas, between buildings and parking areas, and around all service, refuse, and storage areas. Specific commercial landscaping standards are provided in Section 5.4, Commercial Retail Guidelines, and Section 5.5, Mixed Use Guidelines, while residential landscaping requirements are contained in Section 5.6, Residential Guidelines, of the proposed Specific Plan.

(v) Signage

As discussed in Section 4.3, Sign Regulations, of the proposed Specific Plan, a comprehensive sign program will assure that signs for all land uses within the Specific Plan area are integrated into the overall community vision and theme. The purpose and intent of the sign regulations for the Westgate Specific Plan are as follows:

1. Promote signs and graphics that are attractive, pleasing and harmonized with the physical character of the environment and surrounding properties, while serving the advertising needs of the business community;

2. Promote traffic safety and the smooth and efficient flow of pedestrians and vehicles to their destinations;

3. Direct persons to various activities and enterprises, in order to provide for maximum public convenience.

Proposed signage includes community monument signs and commercial parcel area signs. Where there is more than one monument sign located within any Planning Area, all such signs must have designs which are well related to each other by the similar treatment including the following six design elements:

1. Type of construction materials as used in the several sign components, such as cabinet, sign copy, supports.

2. Letter style of sign copy.

3. Illumination.

4. Type or method used for supports, uprights or structure on which sign is supported.

5. Sign cabinet or other configuration of sign area.

6. Shape of entire sign and its several components.

Each monument sign must be located in a landscaped area which is of a shape, design and size that will provide a compatible setting and ground definition to the sign. The planted landscaped area must be maintained on a reasonable and regular basis. Monument signs must be nonmoving stationary structures. In all components and illumination (if any) must be maintained by artificial light (either internally or externally) which is stationary and constant in intensity and color at all times (non-flashing).

All retail, office, business park and live/work uses will be considered non-residential property as relates to signage standards. A uniform sign program for all new multi-tenant developments of three or more separate tenants is required for all retail, office, business park, and live/work uses and is subject to approval by the Director of Community Development.

The maximum height of a free-standing monument for business park, office and retail uses is five feet high and eight feet wide. Live-work homes will be permitted to include hanging plaque signs but no monument signs. Pylon/freeway signs will be permitted up to 60 feet in height for retail centers exceeding 25 acres. Office and business parks exceeding 25 acres in size will require Planning Commission approval for freeway/pylon signs. Any requests exceeding the total number of signs permitted above must be approved by the City Planning Commission.

(b) Specific Plan Community Design Guidelines

Section 5.0, Community Design Guidelines, of the proposed Specific Plan provides standards and guidelines for all major community design elements: site planning, architecture, monumentation, landscape, signage, lighting and other improvements in order to implement the "vision" for the Specific Plan. Sketches, exhibits and representative project photographs are provided throughout the Specific Plan as visual aids in

conveying the basic intent. They are provided as a "palette" of design elements to guide the design of the various sites but are not intended to be interpreted literally or to depict any actual lot or building design. However, all project applications must be in substantial conformance with these guidelines.

Also contained within Section 5.0 are streetscape design concepts for the various roadways within the Specific Plan area, including the City-designated scenic corridors of Cherry Avenue, Baseline Avenue, and Highland Avenue. These streetscape designs include specifications for landscaping such as street trees, informal screening trees, median trees, flowering shrubs, and ground cover.

d. Analysis of Project Impacts

Impacts of the proposed project on aesthetics and visual resources would occur during both temporary construction activities and throughout ongoing operation of proposed uses. The following analysis discusses the short- and long-term impacts of project implementation.

(1) Views/Scenic Vistas

Threshold	Would the project have a substantial adverse effect on a scenic vista?

Impact 4.A-1 Implementation of the proposed project would not have a substantial adverse effect on a scenic vista. This impact is considered less than significant.

The proposed Specific Plan, as noted above, would guide future development within the various on-site Planning Areas, allowing a variety of urban land uses including residential, commercial retail, business park (office/light industrial), educational, public facility, park/recreation, and open space uses within the project boundaries. Implementation of the Specific Plan would result in the long-term, phased development of new structures, infrastructure, and landscaping throughout the Plan area, which would incrementally obstruct views of and across the site over time. With maximum structural heights ranging between 35 and 60 feet (without rooftop architectural features) throughout the various Planning Areas, mid-range and long-distance views generally would be partially or completely obstructed by buildout of proposed uses.[17]

As discussed previously, the City of Fontana identifies a number of scenic corridors within the City, several of which are located within the project area. The east-west corridors of Baseline Avenue and Highland Avenue, the north-south corridor of Cherry Avenue, and the elevated freeway corridors of I-15 and SR-210 are considered significant view corridors within the project area, as they afford long-distance views of scenic resources such as the San Gabriel and San Bernardino Mountains to the north, east, and west, and the Jurupa Hills to the south. While implementation of the proposed Specific Plan would partially or completely obstruct certain views of and across the site, views of these identified scenic resources from designated view corridors would generally be maintained along the roadway corridors. Specifically, views of the San Gabriel Mountains to the north and Jurupa Hills to the south would be preserved along Cherry Avenue's north-south alignment, while views of the San Bernardino Mountains to the east and San Gabriel Mountain foothills to the west would be maintained along the east-west alignment of Baseline Avenue and Highland Avenue.

[17] *Maximum building heights within Planning Area 24 under the R-4 designation would be 60 feet not including architectural features, which is comparable to maximum building heights under the MU-1 designation.*

Additionally, given the elevated location of the I-15 and SR-210 corridors, views of scenic resources from these highway segments would not be substantially reduced. Future development of proposed uses within the Specific Plan area could reduce or eliminate views of scenic resources from certain areas within and adjacent to the project site. However, significant views of the San Gabriel Mountains, San Bernardino Mountains, and Jurupa Hills would generally be at least partially preserved along City-designated view corridors. As such, impacts to scenic vistas resulting from implementation of the proposed project would be less than significant.

(2) Aesthetics/Visual Character

Threshold	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Impact 4.A-2 Implementation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact is considered less than significant.

(a) Construction Impacts

The vast majority of the project site is vacant, and as such, the existing condition generally does not contribute to the visual quality or aesthetic value of the area. Future construction of proposed uses would require site clearing and grading activities within each affected Planning Area, followed by trenching/utility installation and street and building construction. Construction activities would occur intermittently throughout implementation of the proposed Specific Plan, with market forces determining the timing and location of each development project. As such, construction activities at any one location would be temporary and would therefore only result in impacts for the duration of construction within that particular Planning Area. Nonetheless, given the undeveloped nature of the project area, short-term adverse visual character impacts could occur during temporary construction activities as equipment, materials, personnel, temporary structures (contractor trailers), worker vehicles, and other features would be located on the development site. While site clearing and grading, as well as the placement of construction equipment, vehicles, materials, and other visually unappealing features on the project site, could detract from the visual character of the project site, this impact is not considered significant due to the disturbed nature of the project site and lack of notable visual features on-site. Furthermore, construction fencing with visual screening would be installed around the perimeter of all construction areas, thereby minimizing the potential for substantial adverse aesthetic/visual character impacts during construction activities.

(b) Operations Impacts

As noted above, the vast majority of the project site is characterized by disturbed, undeveloped land that was historically used for vineyards or other agricultural activities, and therefore very few structures currently exist on-site, and the site generally lacks aesthetic improvements such as landscaping or other visual buffers. Implementation of the proposed Specific Plan would result in the long-term, incremental development of urban uses within the various Planning Areas, which would fundamentally change the visual character of the project site. However, future development pursuant to the Specific Plan would be consistent with applicable policies of the General Plan Community Design Element that encourage new development that exhibits unified and visually cohesive urban design elements (refer to the discussion presented below in **Table 4.A-1**, *General Plan Consistency Analysis*). Development of future uses in accordance with the various Specific Plan

development standards and design guidelines, therefore, would represent an improvement in visual quality relative to the existing vacant, undeveloped condition of the majority of the project site. Thus, despite the conversion of vacant land to urban uses, development of proposed uses would serve to improve the overall visual character of the project site since the Specific Plan includes development standards and design guidelines that ensure visually cohesive and attractive urban design patterns within the various Planning Areas. As discussed previously, these development standards and design guidelines regulate allowable uses, structural heights, setbacks, wall/fence features, landscaping, signage, and lighting throughout the Specific Plan area, which precludes the potential for incompatible or inconsistent development patterns or urban designs.

The City identifies five scenic roadway corridors within the project area, including Baseline Avenue, Highland Avenue, Cherry Avenue, and the I-15 and SR-210 corridors. The proposed Specific Plan, consistent with the City's General Plan, includes extensive streetscape and landscape improvements along all roadways within the Plan area, including Baseline Avenue, Highland Avenue, and Cherry Avenue. These improvements would serve to meet the intent of the General Plan for these scenic thoroughfares and provide visual relief along the affected segments of the roadways, consistent with the existing and proposed surrounding development. Furthermore, landscape screening would be provided along the project boundaries adjacent to the I-15 and SR-210 freeway corridors to provide visual relief for future development in adjacent Planning Areas, which would reduce visual quality impacts along the freeway alignments.

Overall, since all development within the Specific Plan boundaries would be required to comply with the Specific Plan development standards and design guidelines, which would represent an aesthetic improvement relative to existing site conditions, and designated scenic roadway corridors would be improved with landscaping and other design treatments, implementation of the Plan would result in improved overall visual character relative to existing conditions. As such, despite the conversion of the project site from vacant land to urban uses, the proposed Specific Plan would result in less than significant operational visual character impacts.

(3) Light and Glare

Threshold	Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

4.A-3 Implementation of the proposed project would not create substantial light or glare which would adversely affect day or nighttime views in the area. This impact is considered less than significant.

(a) Construction

Lighting needed during project construction could generate light spillover in the vicinity of the project including residential uses to the south and east. However, construction activities would occur primarily during daylight hours and any construction-related illumination would be used for safety and security purposes only, in compliance with FMC light intensity requirements. Construction lighting also would last only as long as needed in the finite construction process. Thus, with the implementation of existing FMC regulations, artificial light associated with construction activities would not significantly impact residential uses, substantially alter the character of off-site areas surrounding the construction area, or interfere with

the performance of an off-site activity. Therefore, artificial light impacts associated with construction would be less than significant.

Construction activities are not anticipated to result in large expanses of flat, shiny surfaces that would reflect sunlight or cause other natural glare. Therefore, less than significant construction-related impacts with respect to reflected sunlight and natural glare are anticipated.

(b) Operation

(i) Artificial Light

Implementation of the proposed Specific Plan over the long-term would incrementally increase the relatively low levels of ambient light under the existing conditions. Light-sensitive land uses in the area include residential uses along Baseline Avenue, Highland Avenue, Cherry Avenue, Lytle Creek Road, and Summit Drive. New light sources within the Specific Plan area would include light from windows of residential structures and retail uses (and to a lesser extent office uses given typical business hours), outdoor architectural lighting, parking lot lighting, and sign-related lighting, as well as light from street lights, vehicles traveling along on-site and adjacent roadways, and security lighting. Such lighting has the potential to create a "glow" effect within and around the project area, including adjacent residential neighborhoods, and result in an overall increase ambient light in the area. This increase in ambient lighting, however, is not expected to interfere with activities in on-site or adjacent residential neighborhoods, as they already would be subject to similar lighting conditions. As noted previously, up to 20.0 acres of business park uses within Planning Area 24 could be replaced with high density residential uses, which could result in additional light sources within the residential portions of the planning area. However, the effect of the incremental increase in light sources associated with the residential uses would be negligible in the context of the overall development pattern in the area, which would include indoor and outdoor lighting and intervening structures and vegetation that would limit light-related impacts to adjacent uses.

Exterior lighting would also include lighting provided at vehicle entry points and areas of circulation; points of entry into buildings; along the exterior façades of buildings; and other outdoor areas (e.g., parks, paseos, common open space areas) for both architectural highlighting and security purposes. Lighting for security purposes would occur from dusk to dawn to ensure the safety of residents, employees, and visitors. Lighting would primarily consist of a mix of standard incandescent light fixtures, as well as various types of efficient/low energy fixtures. Lighting would be designed and strategically placed to minimize glare and light spill onto adjacent properties. Specifically, any pole-mounted light fixtures located on-site or within the adjacent public rights-of-way would be shielded and directed towards the areas to be lit and away from adjacent sensitive uses. In addition, all project lighting would comply with the FMC and/or the Specific Plan requirements listed above that have been established to limit light spill on light-sensitive (residential) uses.

Based on the above, with adherence to the Specific Plan lighting guidelines and any other applicable FMC regulations, lighting associated with the project would not substantially alter the character of the off-site areas surrounding the project site and would not interfere with the performance of an off-site activity. Impacts attributable to project-induced artificial lighting would be less than significant.

(ii) Glare

Daytime glare can result from sunlight reflecting from a shiny surface that would interfere with the performance of an off-site activity, such as the operation of a motor vehicle. Reflective surfaces can be associated with window glass and polished surfaces, such as metallic or glass curtain walls and trim. Glare generation within the project vicinity is limited, as surrounding development consists predominately of low-rise residential and commercial buildings that generally lack large expanses of glass or other reflective materials. Glare-sensitive uses in the project area include single-family residential uses located to the south and east of the project site, and no glare-sensitive uses are currently located within the project area. Future development would be subject to the Specific Plan development standards and design guidelines, which include provisions for architectural design (including window design/placement), types of building materials, and landscape screening, and would therefore minimize glare impacts to adjacent or other off-site land uses. Given the nature of future uses and associated design requirements, glare impacts are anticipated to be less than significant.

(4) Policy and Regulatory Compliance

(a) City of Fontana General Plan

The City of Fontana General Plan includes various goals and policies within the Community Design Element that relate to aesthetics, visual quality, and scenic resources. An analysis of the proposed Specific Plan's consistency with each of the applicable goals and policies contained in the Community Design Element is presented below in **Table 4.A-1**, *General Plan Consistency Analysis*. As indicated in Table 4.A-1, the proposed Westgate Specific Plan would be consistent with the applicable goals and policies of the General Plan Community Design Element with respect to aesthetics, views, and light and glare. As such, impacts in this regard would be less than significant.

(b) Fontana Municipal Code

Future development pursuant to the project area would be subject to the lighting requirements of the FMC, as applicable. Given compliance with FMC lighting requirements (where not superseded by Specific Plan lighting requirements), impacts related to FMC consistency would be less than significant.

Table 4.A-1

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Goal #1: Our City has a unified overall community image and appearance with distinct districts and neighborhoods.	
Policy 1-1: Major entry points or gateways into the City, especially along arterial corridors, shall be marked with City identification and with enhanced landscaping and streetscaping to highlight Fontana's identity.	**Consistent.** The proposed Specific Plan provides for the inclusion of monumentation to identify uses within the area as well as extensive landscaping and streetscapes. The proposed project would not preclude or otherwise limit the provision of City signage or other identification or impede the installation of landscaping or streetscape features.
Policy 1-2: Arterial corridors should be improved with installation of a palette of consistent landscaping and street furniture to reinforce the City's identity.	**Consistent.** The proposed project provides a unified landscaping palette and streetscape improvements through its development regulations and design guidelines.
Policy 1-3: The City logo should appear in all public spaces and on public facilities.	**Consistent.** As required or otherwise deemed appropriate by the City, the City logo would be included on all public uses within the Specific Plan Area.
Policy 1-4: Development in north Fontana should be designed to incorporate elements consistent with a Mediterranean design theme.	**Consistent.** The proposed Specific Plan allows for, among others, Mediterranean design themes in its design guidelines.
Goal #2: We preserve and use our open spaces as recreational amenities, visual boundaries and view corridors.	
Policy 2-1: The design of major community facilities such as the community centers, parks, bikeways and trails will take advantage of the views provided by the adjoining mountains and hills.	**Consistent.** The proposed project's bikeways and trails plan, as shown in Figure II-15 in Chapter 2.0, *Project Description*, of this Draft EIR, affords views along established corridors of the San Gabriel and San Bernardino Mountains, and limited views of the Jurupa Hills.
Policy 2-2: A series of strategic points along the scenic corridors will be created where special community design and landscape treatment is warranted.	**Consistent.** The proposed Specific Plan includes outdoor recreational and activity centers that incorporate extensive landscaping and structural features that are visually appealing and provide a sense of place.
Policy 2-3: The City's open space network shall be designed to integrate both the built and natural environment.	**Consistent.** The Westgate Specific Plan includes extensive open space areas that are interlinked by trails and other pedestrian and bicycle facilities with on- and off-site park, school, residential, commercial, and industrial uses.

Table 4.A-1 (Continued)

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Policy 2-4: Preservation of open space near the periphery of City boundaries provides important visual contrast to the built environment.	**Consistent.** The proposed Specific Plan retains a multitude of Planning Areas within the Plan boundaries as open space and parks, intermixed with more intense urban uses.
Goal #3: The major arterial thoroughfares of the City contribute to the overall image and diverse character of the community.	
Policy 3-1: Major arterial highways shall be improved according to customized design guidance within and adjacent to public rights-of-way.	**Consistent.** The proposed project would require the improvement of all on-site arterials per the approved design guidelines contained in the Specific Plan.
Policy 3-2: Commercial and industrial uses adjacent to or within designated corridors shall be developed and revitalized to reflect contemporary design standards as defined in this Plan.	**Consistent.** Proposed commercial and light industrial uses would be subject to the development regulations and design guidelines included in the Specific Plan.
Policy 3-3: Continue to pay special attention to designs that include screening, berms, fencing and landscaping for industrial uses, especially regarding outside storage and handling areas.	**Consistent.** Proposed light industrial uses would be subject to the development regulations and design guidelines included in the Specific Plan, which would require appropriate screening and separation from adjacent uses.
Goal #4.1: We have a vibrant, identifiable downtown that serves the diverse needs of its residents and readily attracts visitors.	
Policy 4.1-1: Design guidelines for the downtown area that incorporate consistent community symbols and distinct design features shall mark it as an area of special importance in the community.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.1-2: Key features of the Civic Center design guidance should also be reflected in other public facilities throughout the City.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.1-3 Existing and proposed landmarks within the downtown area should be featured in design concepts and improvement plans.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.1-4: To the extent practical, downtown architecture should reflect a "Main Street", small town character that is readily visible to passing traffic and comfortably accessible to pedestrians.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.

Table 4.A-1 (Continued)

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Policy 4.1-5: In the downtown area and near major public facilities, the preferred architectural styles include "Main Street" Commercial, Spanish Colonial/Mediterranean, Art Deco, Craftsman Bungalow and Streamline Moderne.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Goal #4.2: Our revitalized downtown incorporates a new Civic Center Campus, existing notable architecture, enhanced pedestrian amenities and cultural centers.	
Policy 4.2-1: Significant architecture and cultural features of our downtown area should be preserved and rehabilitated.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.2-2: Development proposals shall be reviewed for compliance with the Civic Center Campus plan and the adopted downtown design guidelines.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.2-3 Links to Fontana's historic and agricultural past should be a theme along the Pacific Electric Inland Empire Trail and at other key points in the downtown area.	**Not Applicable.** Although the improved Pacific Electric Inland Empire Trail abuts the project site's southern boundary, this policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Policy 4.2-4: Achievement of this goal shall be accomplished by a combination of incentives, guidelines and regulations.	**Not Applicable.** This policy relates to actions taken by the City to foster Downtown revitalization and therefore is not applicable to the proposed project..
Policy 4.2-5: Historic themes and elements – such as displays, murals, plaques and other artifacts – should be adapted where appropriate in public gathering places.	**Not Applicable.** This policy relates to development within the Downtown portion of the City and therefore is not applicable to the proposed project.
Goal #5.1: Existing and new development reflects extensive use of high-quality, contemporary design, incorporating unifying, community-wide design elements.	
Policy 5.1-1: Citywide landscape standards shall continue to be applied in new and revitalized development throughout the City.	**Consistent.** The Specific Plan's development regulations and design guidelines, as approved by the City of Fontana, would require extensive and consistent landscaping for future development projects on-site. The Specific Plan landscaping standards, subject to approval by the Director of Community Development, would be consistent with applicable Citywide landscape standards.

Table 4.A-1 (Continued)

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Policy 5.1-2: New development should be linked to community facilities such as trails, parks, community centers and schools.	**Consistent.** The Westgate Specific Plan includes trails and other pedestrian and bicycle facilities that provide connections to on- and off-site park, school, residential, commercial, and industrial uses.
Policy 5.1-3 View fencing and distinctively articulated masonry walls are preferred to long stretches of block walls adjoining residential areas.	**Consistent.** The proposed project provides for consistent and attractive designs for walls and fences through its development regulations and design guidelines.
Goal #5.2: Neighborhood organization and design reflect diverse and high quality development standards, strong integration into the broader community, and energy-efficient environmental siting standards.	
Policy 5.2-1: Schools and parks should be conveniently located within new residential communities.	**Consistent.** The proposed project provides three school campuses on-site to serve future residents of new residential communities within the Specific Plan area.
Policy 5.2-2: Higher density residential uses should be located near retail and activity centers.	**Consistent.** The proposed Specific Plan's land use plan locates higher residential densities near existing and proposed retail and business park uses. High density residential uses would be located adjacent to mixed use business park uses within Planning Areas 14, 17, and 24.
Policy 5.2-3 A well-integrated network of bike and pedestrian paths should connect residential areas to schools, parks, and shopping centers.	**Consistent.** The Westgate Specific Plan includes an extensive network of trails and other pedestrian and bicycle facilities that provide connections to on- and off-site park, school, residential, commercial, and industrial uses.
Policy 5.2-4: Distinct neighborhood identities should be achieved by continuing to apply streetscape and landscape design, entry treatments, and architectural detailing standards.	**Consistent.** The proposed Specific Plan provides for the inclusion of monumentation to identify uses within the area as well as extensive landscaping and streetscapes. The development regulations and design guidelines would be applied to all development within the Specific Plan area, resulting in consistent design themes, though each neighborhood would be designed and developed individually thus allowing for distinct identities.
Policy 5.2-5: In large-scale residential developments, diversity of floor plans, garage orientation, setbacks, styles, building materials, color and rooflines shall be preferred over more uniform design patterns.	**Consistent.** The development standards and design guidelines of the Specific Plan allow for a wide range of development types, layouts, floor plans, and architectural styles and materials.

Table 4.A-1 (Continued)

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Policy 5.2-6: Varied front setback requirements and garage orientation as well as shared parking arrangements shall be encouraged.	**Consistent.** The proposed Specific Plan provides development standards that allow a variety of setback options as well as opportunities for shared parking, where appropriate.
Policy 5.2-7: Environmentally sensitive and energy-efficient building siting standards, which minimize impacts from wind, provide shade, reduce stormwater-runoff and maximize opportunities for passive solar design, should be incorporated into design guidelines for large-scale projects.	**Consistent.** The proposed project would implement various sustainability features as summarized in Chapter 2.0, *Project Description*, of this Draft EIR, and all future development would be subject to CalGREEN building standards, thus improving overall sustainability of the project.
Policy 5.2-8: A range of housing densities and product types shall be encouraged in residential developments where feasible.	**Consistent.** The proposed Specific Plan allows for a range of residential densities on-site, from larger lot single-family homes to high density apartment units.
Goal #5.3: Activity centers, including shopping centers, contain a high level of pedestrian amenities, distinct and varied architectural details, and careful integration into surrounding residential areas.	
Policy 5.3-1: Development within new mixed-use land use designations shall reflect creative site planning, vertical or horizontal combinations of uses, convenient access and clear signage.	**Consistent.** The proposed Specific Plan includes various mixed use land use designations (MU-1, MU-2, and MU-3), which are intended to create a horizontal combination of office, light industrial, warehouse/trucking, and retail uses.
Policy 5.3-2: Newly developed shopping and activity centers shall be linked to surrounding residential uses through convenient bicycle and pedestrian paths.	**Consistent.** The Westgate Specific Plan includes an extensive network of trails and other pedestrian and bicycle facilities that provide connections to on- and off-site park, school, residential, commercial, and industrial uses.
Policy 5.3-3 Provision of people-gathering places and amenities – such as mini-plazas, courtyards, benches, movable seating, shade, trash receptacles, and water fountains – should be encouraged in new development and revitalization projects.	**Consistent.** The proposed project provides multiple locations and opportunities for gathering places and amenities supportive of public use, including parks, trails, open space, shopping centers, and business parks, all with extensive landscaping and other people-friendly amenities such as benches and trash cans.
Policy 5.3-4: Buildings in activity centers shall be oriented toward major thoroughfares, sidewalks and public spaces with convenient but not visually dominating parking on site.	**Consistent.** The proposed Specific Plan's development standards regulate the general location and orientation of proposed structures relative to the street and other access points. Parking would be provided to meet projected demands as articulated in the Specific Plan or FMC.

Table 4.A-1 (Continued)

General Plan Consistency Analysis

Community Design Element	
Goal/Policy	**Project Consistency Statement**
Policy 5.3-5: Architectural interest and variety shall be maintained through varied rooflines and detailed façade treatments.	**Consistent.** The proposed Specific Plan's development standards and design guidelines allow for a wide range of architectural styles and design treatments that facilitate visual interest.
Policy 5.3-6: The size and design of signs shall be related to the scale of the building or development and its relation to the street.	**Consistent.** The signage standards contained in the proposed Specific Plan, subject to review and approval by the City, would ensure that the size and design of signs is appropriate for respective land uses.
Policy 5.3-7: Parking areas shall continue to be buffered from the street and provide, where practical, a pedestrian spine for safe access to shopping and activity areas.	**Consistent.** The Specific Plan requires extensive landscaping and appropriate screening of parking areas from adjacent uses and streets, and also provides a network of pedestrian-friendly facilities that interconnect all on-site uses.
Goal #6: Conflict and spillover effects at the interface of differing land uses are minimized with appropriate design standards.	
Policy 6-1: Specialized design standards and regulations shall be applied to those areas where conflicting land uses meet.	**Consistent.** The Westgate Specific Plan includes development standards and design guidelines to ensure that conflicts between adjacent and nearby land uses are minimized.
Policy 6-2: The Zoning Ordinance shall incorporate provisions for keeping land use conflicts to a minimum.	**Consistent.** The proposed Specific Plan, consistent with the City's Zoning Code, includes development standards and design guidelines to ensure that conflicts between adjacent and nearby land uses are minimized.
Policy 6-3: One or more techniques for reducing land use conflicts may be applied in any particular situation.	**Consistent.** The proposed Specific Plan includes flexibility allowing for a variety of tools to be employed to minimize land use conflicts, including setbacks, building orientation, physical separation, light shielding, and landscaping/screening for proposed uses.
Policy 6-4: Maintain a strong program of code enforcement to address land use conflicts.	**Consistent.** Development within the Specific Plan area would be subject to the City's Code Enforcement efforts, as is all development within the City's jurisdiction.

Source: PCR Services Corporation, 2014

4. CUMULATIVE IMPACTS

Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR provides a list of projects that are planned or are under construction in the proposed project study area. Four related projects have been identified in the proposed project's study area, which comprise four approved Specific Plans located to the northeast of the Westgate Specific Plan area. The remainder of the surrounding area, including areas west of I-15 in the City of Rancho Cucamonga, is nearly completely urbanized.

Impacts to views within the northern portion of the City of Fontana would result from implementation of the various Specific Plans in the vicinity of the project site. Given that these Specific Plans are consistent with the development pattern envisioned in the City's General Plan, which organizes land uses in order to, among other goals, establish and maintain designated view corridors including on-site and adjacent corridors (Cherry Avenue, Baseline Avenue, Highland Avenue, I-15, and SR-210) and those located near the related projects (Citrus Avenue and Sierra Avenue). As such, these roadways, as well as utility corridors, bike trails, greenways, parks, and open space areas linked with one another would provide for views throughout the north Fontana area, though the increased development of urban uses and landscaping could limit some foreground and mid-distance views in proximity to new residential communities, retail centers, and business parks. As the street pattern in the project area would generally be maintained throughout implementation of Specific Plan developments, and associated views of scenic resources along these view corridors would not be substantially affected, views of the mountains to the north and south from some of the undeveloped portions of the project site and related project sites would be permanently lost. However, given adherence to the applicable policies in the City's General Plan and relevant design guidelines in each respective Specific Plan, views of scenic resources, including the San Gabriel Mountains, San Bernardino Mountains, and Jurupa Hills, would not be significantly reduced. Therefore, the cumulative impact to views/scenic vistas would not be considered significant and the proposed project's contribution to this impact would not be considerable.

As discussed above, development of proposed uses would be subject to the Specific Plan development standards and design guidelines, which would guide development to create a visually cohesive urban pattern within the area. Similarly, development pursuant to the related projects would be subject to the development standards and design guidelines contained in each respective Specific Plan. Since all Specific Plans and associated development projects are subject to design review by the City of Fontana, which ensures that development within the City does not detract from the overall visual quality or character of the area. Given adherence to the approved development standards and design guidelines of the Westgate Specific Plan and related project Specific Plans within their respective areas, and associated design review by the City, the proposed project and related projects would not have a substantial adverse effect on the visual character or quality of the project area. Therefore, the cumulative impacts of the proposed project would be less than significant, and the proposed project's contribution would not be cumulatively considerable.

The area surrounding the Specific Plan boundaries is urbanized land and therefore contains numerous existing sources of nighttime lighting. Cumulative development would constitute further intensification of an existing urban and nearly built-out area and would generally occur through redevelopment or infill development. Although new development or redevelopment could include direct illumination of project structures, features, and/or walkways, the cumulative increase in ambient lighting levels in these areas would only rise minimally because a significant amount of ambient lighting currently exists due to the urbanized nature of the surrounding area. Thus, the increases in nighttime lighting that would occur with

development within each Specific Plan area would not significantly affect nighttime views of the sky because such views are currently limited. Cumulative development, in combination with the proposed project, is not anticipated to result in the creation of new sources of light that could negatively affect nighttime views. Therefore, cumulative impacts associated with ambient nighttime lighting would be considered less than significant.

The cumulative context for spillover light would be other development that could add to the spillover light effects of the proposed project on properties in the adjacent areas. Spillover light is site-specific effect that is affected only by projects in the immediate vicinity of the affected property. Implementation of the proposed project in combination with nearby related projects would add lighting typical of urban development to the area. This includes directed lighting for architectural accents, signage, landscape elements, security and way finding lights associated with buildings and parking lots, light emanating from building interiors and exteriors, streetlights and automobile headlights. Lighting impacts would be addressed through compliance with the proposed Specific Plan and approved related project Specific Plans, which include lighting requirements that would reduce the potential for spill lighting to occur from future development in the Plan areas. Therefore, a less than significant cumulative impact would result from spillover lighting.

Cumulative development could result in an increase in glare, as specific building materials and configurations are uncertain. However, these potential increases are likely to be minor and consistent with the existing built environment due to limited development potential and existing City regulations. Future projects would be subject to each Specific Plan's development standards and design guidelines, which include provisions for architectural design (including windows), types of building materials, and landscape screening, and would therefore minimize glare impacts to adjacent or other off-site land uses. Therefore, cumulative glare impacts within the surrounding area would be less than significant. Implementation of the proposed project would not result in a significant daytime glare impact and would not result in a cumulatively considerable contribution to this impact.

5. MITIGATION MEASURES

No feasible mitigation measures exist that could reduce the significance of impacts to scenic vistas.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to aesthetics, views, visual character, light and glare would be less than significant.

All impacts related to views/scenic vistas, aesthetics/visual character, and light and glare would be less than significant given compliance with Specific Plan development standards and design guidelines, or FMC requirements, as applicable. Additionally, the proposed Specific Plan is consistent with the applicable goals and policies contained in the Community Design Element of the City's General Plan, and also would not result in conflicts with FMC requirements. Therefore, impacts related to policy and regulatory compliance would be less than significant.

4. ENVIRONMENTAL IMPACT ANALYSIS
B. AGRICULTURE AND FORESTRY RESOURCES

1. INTRODUCTION

This section evaluates the impact of implementation of the proposed Westgate Specific Plan on agricultural resources in the project area and the region. The analysis presented in this section is based on information contained in the City of Fontana General Plan, relevant maps and reports provided by the Natural Resources Conservation Service (NRCS), and guidance provided by the California Department of Conservation's Land Evaluation and Site Assessment (LESA) Model. The LESA model calculations and associated maps are included in their entirety in Appendix M of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Agricultural Conditions

(1) Regional Conditions

According to the 2012 Crop and Livestock Report, the gross value of agricultural production in San Bernardino County for 2012 totaled $466,502,500, a decrease of $52,914,900 from the previous year.[1] This decrease is primarily due to the reduction in the dairy industry in the Chino and Fontana areas.

Only field crops and vegetable production maintained values similar to the previous year as development continues to displace the agricultural use of land. Acreage for high-value nursery production increased by 8.9 percent. The value of agricultural production has not only declined in total amount but also in total economic impact when adjusted for inflation. Growers and ranchers see a continual decline in "real" dollar income as prices for agricultural goods fail to keep up with inflation. In order to stay in business, growers and ranchers constantly look for new ways to increase production, reduce costs and gain a market advantage. Many small acreage growers have found direct marketing and unique varieties to be very profitable.

San Bernardino County's top ten commodities had a combined gross value of $417,651,200 and accounted for 89.5 percent of total agricultural production in 2012. The top ten agricultural products by gross value, including the percent of overall gross value, are as follows (in descending order by percentage of total):

- Milk (56.7 percent)
- Eggs (9.2 percent)
- Cattle and Calves (meat) (8.5 percent)
- Alfalfa (4.5 percent)

[1] *San Bernardino County Department of Agriculture/Weights and Measures. "2012 Crop and Livestock Report for San Bernardino County, California". 2013. http://cms.sbcounty.gov/Portals/13/CropReports/2012%20crop%20%20livestock.pdf Accessed March 2014.*

- Bok Choi (2.5 percent)
- Replacement Heifers (2.2 percent)
- Trees and Shrubs (1.9 percent)
- Indoor Decoratives (1.5 percent)
- Oranges (1.3 percent)
- Turf (1.2 percent)

The 2012 report identified San Bernardino County as having a total of 1,407,603 acres involved in agricultural activities. The breakdown of land dedicated to each of the various agricultural commodity groups is provided in **Table 4.B-1**, *San Bernardino County Agricultural Land Summary*, below. However, given the nature of dairy and livestock operations, acreages are not relevant to total production of that commodity group, and therefore no acreage is provided.

Table 4.B-1

San Bernardino County Agricultural Land Summary

Commodity Group	2012 Acreage	2012 Dollar Value
Field Crops	1,396,912	$28,825,100
Vegetable Crops	5,111	$25,721,100
Fruit & Nut Crops	4,443	$13,590,600
Livestock & Poultry	N/A	$370,029,900
Nursery Products	1,147	$28,335,800
TOTAL	**1,407,603**	**$466,502,500**

Source: PCR Services Corporation, 2014

The 2012 Crop and Livestock Report identified a total of 75 dairies as of January 1, 2013, down from a total of 86 dairies identified on January 1, 2012, while the dairy herd decreased from 77,350 in January of 2012 to 70,900 in January of 2013. This continues a trend in steadily decreasing dairy herds from an all-time high of approximately 190,000 in 1997. The estimated value of the dairy products (milk and milk by-products) within the Chino Basin is approximately $264 million. The total economic value from the livestock and livestock products is approximately $370 million.

Field crops slightly increased in acres harvested from 1,396,900 acres in 2011 to 1,396,912 acres in 2012. Fruit and nut crops slightly decreased in acres harvested from 4,448 acres in 2011 to 4,443 acres in 2012. Vegetable crops decreased in acres harvested from 5,254 acres in 2011 to 5,111 acres in 2012. Nursery products increased in field acres from 1,040 acres in 2011 to 1,135 acres in 2012. As previously indicated, livestock and poultry are not reported in acres harvested.

In general, the economic vitality of agriculture in the City of Fontana and the Southern California region has declined in direct response to increased urbanization pressures that convert agricultural land to urban uses. This trend is anticipated to continue due to continued urbanization of Southern California land and increased

competition from other regions within the State, most notably the San Joaquin Valley, and other states located in the Western United States.

(2) City Agricultural Conditions

Citrus orchards, vineyards, livestock, and poultry farming have been the principal forms of agriculture found in Fontana. While prominent in the City's past, these agricultural practices have declined in response to population growth and land development pressures, and are no longer a significant element of the local economy. Remaining undeveloped land considered suitable for farming purposes is planned for a variety of urbanized uses, including residential, commercial and industrial development. Given the minor level of investment in existing agricultural operations, limited supply of suitable farmland and the City's preference for accommodation of population growth and economic development, agricultural resources are not included as a component of the City's General Plan Open Space and Conservation Element.

(3) Project Site Agricultural Conditions

The project site is not currently being utilized for significant agricultural operations, although a large portion of the project site was historically used for vineyards, any current agricultural operations on the project site are relatively nominal. Further, no other agricultural production occurs in the surrounding area. Nonetheless, according to the California Department of Conservation, approximately 444 acres of on-site land are designated as Unique Farmland in the Important Farmland Map for South San Bernardino County.[2] Refer to Appendix M of this Draft EIR for graphic illustrations of agricultural land within the project site and surrounding area.

b. Regulatory Framework

(1) Williamson Act

The California Land Conservation Act (Williamson Act) was passed in 1965 to protect specific parcels of land in agricultural and open space use. Landowners enter into ten-year contracts with local governments and in return receive lower property tax assessments. Administration of the program involves two sets of records, one being the contracts between the property owner and the County, and the other being a series of agricultural preserve maps establishing the boundaries of lands under contract. The City of Fontana administers this program for the County. Contracts are valid for an initial period of ten years and automatically renew each year to maintain a ten-year life. The property owner or the local planning jurisdiction may initiate a notice of non-renewal, stopping the automatic annual renewals and placing the contract in a status in which it completes its remaining ten-year life. Alternatively, a property owner may cancel a contract, subject to an approval process and penalties, to provide an immediate end to the contract. The Williamson Act specifies that contracts under the Act may only be cancelled if that cancellation is consistent with purposes of the Act and if the cancellation is in the public interest. To approve cancellation, the City Council must find that the cancellation is either: (1) consistent with the purposes of the Williamson Act, or (2) in the public interest. (Gov. Code, Section 51282, dubd. (a).) No portion of the project site, or the City of Fontana, is currently under a Williamson Act contract.

[2] *California Department of Conservation, Division of Land Resource Protection, "San Bernardino County Important Farmland 2010", Sheet 2 of 2. 2011.*

(2) State Farmland Mapping Program

The California Department of Conservation (CDC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status and identified by the following categories, collectively referred to as Farmland: Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. **Figure 4.B-1**, *Agricultural Land in the Project Area*, below illustrates the existing agricultural land on the project site and surrounding area (referred to as the "Zone of Influence" by the CDC) according to the San Bernardino County Important Farmland Map that was produced by the FMMP. As shown in Figure 4.B-1, the project site contains approximately 444 acres of Unique Farmland, 104 acres of Grazing Land, 105 acres of Urban and Built Up Land, and 312 acres of Other Land. Refer to Appendix M of this Draft EIR for graphic illustrations of agricultural land within the project site and surrounding area.

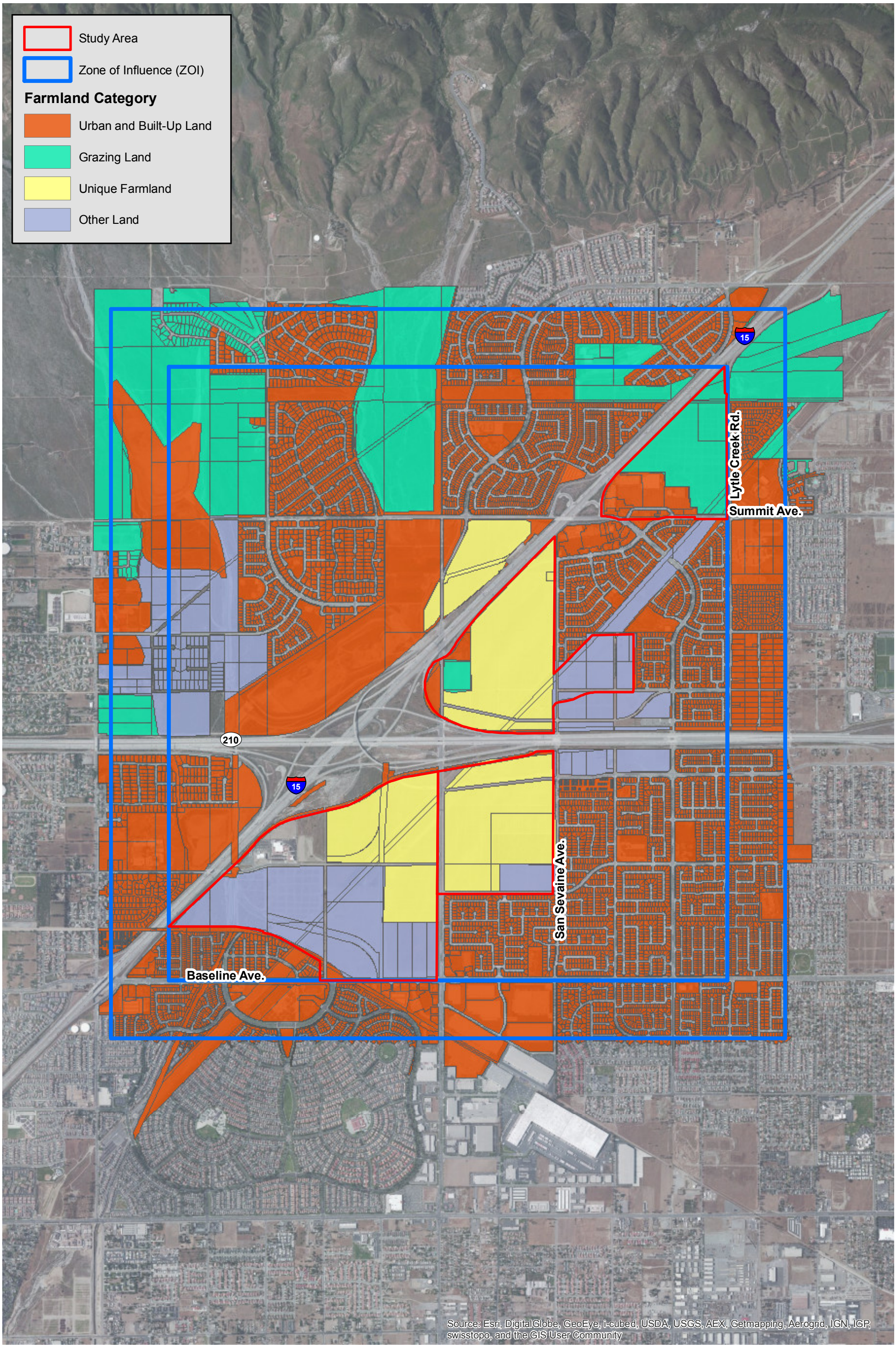
(3) Land Evaluation and Site Assessment Model

Land Evaluation and Site Assessment (LESA) is a term used to define an approach for rating the relative quality of land resources based upon specific measurable features. The formulation of a California Agricultural LESA Model is the result of Senate Bill 850 (Chapter 812 /1993), which charges the Resources Agency, in consultation with the Governor's Office of Planning and Research, with developing an amendment to Appendix G of the California Environmental Quality Act (CEQA) Guidelines concerning agricultural lands. Such an amendment is intended "to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process" (Public Resources Code Section 21095).

The California Agricultural LESA Model is composed of six different factors. Two Land Evaluation factors are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these factors is separately rated on a 100 point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds. This Manual provides detailed instructions on how to utilize the California LESA Model, and includes worksheets for applying the Model to specific projects. An assessment of the proposed project's impacts to agricultural land is included in Appendix M of this Draft EIR.

(4) City of Fontana General Plan

The City's General Plan (2003) does not include a specific land use designation for farmlands or agricultural activities. However, these activities are still allowed in accordance with the Development Code (Section 17.08.030). This regulation permits agricultural uses within residential areas with lots of 2.5 acres or more. However, under the existing General Plan, the majority of remaining farmlands within the City would be converted to urban uses. Lands designated as important farmland that are currently identified as vacant land (including the majority of the project site) comprise approximately 610 acres, as shown in Figure 5.1-2 of the General Plan EIR. The amount of farmland potentially lost to development under the General Plan is, therefore, approximately 610 acres. This represents a potential loss of Prime Farmland, Farmland of



PCR

N

0 2,000 4,000 Feet

Agricultural Land in the Project Area

Westgate Specific Plan

Source: Aerial Express, 2010; Department of Conservation, 2010; PCR Services Corporation, 2014.

FIGURE

4.B-1

This page is intentionally blank.

Statewide Importance, Unique Farmland, and Farmland of Local Importance. However, this remaining undeveloped land considered suitable for agricultural purposes is planned for a variety of urbanized use, including residential, commercial and industrial uses. Given the minimal level of existing agricultural operations, limited supply of suitable farm land, the population growth and economic development, existing viable agricultural land occur in locations that may not be suitable for future or new agricultural practices.

3. PROJECT IMPACTS

a. Methodology

The evaluation of impacts to agricultural resources and operations is based on the amount and quality of agricultural land on-site and in the surrounding area, the effect the proposed project would have on such resources and operations, and the project's conflicts, if any, with rules, regulations, or contracts affecting agricultural land. As such, impacts are assessed based on the significance criteria provided below, relative to the existing regulations relating to agriculture in the area, and utilizing a quantitative model (i.e., the LESA Model, included in Appendix M of this Draft EIR) for evaluating the agricultural value of land.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including agriculture and forestry resources. Based on the following issue areas identified in Appendix G of the CEQA Guidelines, a significant impact relative to agriculture and forestry resources would occur if the project would result in the following:

Threshold 1: 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 of the California Resources Agency, to non agricultural use (refer to Impact Statement 4.B-1 below);

Threshold 2: Conflict with existing zoning for agricultural use, or a Williamson Act contract (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 4: Result in the loss of forest land or conversion of forest land to non-forest use (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.); or

Threshold 5: 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 (refer to Impact Statement 4.B-1 below);

c. Evaluation of Project Impacts

(1) Conversion of Farmland to Non-Agricultural Uses

Threshold	Would the project 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 of the California Resources Agency, to non agricultural use?
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?

Impact 4.B-1 The proposed project would convert the existing agricultural land on the project site to non-agricultural uses. This would result in the permanent conversion of 443.5 acres of land that is designated as Unique Farmland, which is considered a significant unavoidable impact on Farmland and agricultural resources.

As discussed above, the California Department of Conservation's LESA Model is the primary tool used to evaluate the significance of impacts related to the conversion of agricultural land to non-agricultural uses under CEQA. The LESA Model is composed of six different factors, which evaluate the land and the project site. Two Land Evaluation factors are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a project site's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands intended to measure social, economic, and geographic attributes that contribute to the overall value of agricultural land. The factors used in the LESA Model are as follows:

Land Evaluation

- Land Capability Classification; and
- Storie Index.

Site Assessment

The following are the four factors in the LESA model that are used as site assessment scoring criteria:

- Project Size Rating;
- Water Resources Availability Rating;
- Surrounding Agricultural Land Rating; and
- Surrounding Protected Resource Land Rating.

For a proposed project, each of these factors is separately rated on a 100-point scale. A single LESA score is generated for a given project after all of the individual Land Evaluation Factors and Site Assessment factors have been scored and weighted. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds. According to the LESA Model, a project would result in a significant impact on agricultural resources if it meets the criteria specified in Table 9 of the LESA Manual (Appendix M of this Draft EIR). **Table 4.B-2**, *LESA Significance Ratings*, below provides the ratings that determine if a project will result in a significant impact to Farmland.

Table 4.B-2

LESA Significance Ratings

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

Source: California Land Evaluation and Site Assessment Model (LESA), Table 9, California Department of Conservation, 1997.

An overview of the six different factors and the worksheets for the proposed project are contained in Appendix M of this Draft EIR. Therefore, based on the evaluation in the LESA worksheets, the final score for the proposed project is 53.54 points out of a possible 100 points, with a Land Evaluation score of 24.29 and a Site Assessment score of 29.25. The total LESA score is between 40 and 59 points, and both of the scores associated with the Land Evaluation factors or the Site Assessment factors were above the referenced threshold of 20 points. Therefore, given that the project would result in the ultimate conversion of approximately 444 acres of Unique Farmland to non-agricultural use , and per the LESA significance ratings contained in Table 4.B-2 above, implementation of the proposed project would have a significant and unavoidable impact on Farmland and agricultural resources.

4. CUMULATIVE IMPACTS

Future planned urban development in the City of Fontana and the southern California region is anticipated to result in the conversion of agricultural uses to non-agricultural uses that would substantially reduce overall agricultural productivity and acreage of agricultural land. Implementation of the proposed project would contribute to the cumulative loss of such resources, as would implementation of related projects listed in Table 3-1 in Chapter 3, Basis for Cumulative Analysis, of this Draft EIR. As such, implementation of the Westgate Specific Plan and other related projects would result in a significant unavoidable cumulative impact relative to the reduction of agricultural productivity within the region.

5. MITIGATION MEASURES

The 2003 General Plan EIR did not include any mitigation measures for the conversion of agricultural land to non-agricultural uses or include any mitigation measures that would avoid the impacts related to agricultural productivity, and the potential to provide on-site mitigation for the loss of agricultural land is considered infeasible for several reasons, each of which is sufficient to determine that such measures are not required to be taken. First, because approximately 46 percent of the project site is considered Unique Farmland, which is not evenly distributed across the project site, the only feasible on-site mitigation would be avoidance (i.e., to not implement the proposed project). However, avoidance is infeasible because of the inconsistency with the City General Plan designations for the project site and the effect this could have on the overall implementation of the City's General Plan. Second, retaining a substantial portion of the project site for agricultural uses would also be infeasible. Besides conflicting with the planned land uses designated for the site in the City's General Plan, the resumption of agricultural operations in proximity to existing and future residential, commercial, educational, and recreational uses would negatively affect such uses and would create a nuisance for people living, working, and recreating in the area. Retaining any portion of the project site for long term or permanent agricultural production is infeasible because agricultural production in the region continues to decline in economic viability due to escalating land prices, environmental regulations, increasing water costs, higher labor costs, and competition from other regions in California and from other states. Therefore, agricultural uses on small acreages, such as a portion of the project site, would likely be, or quickly become, not economically viable. Market forces also contribute to the acceleration of urbanization in the City and associated decline in economic viability of agricultural production in the area. Therefore, no mitigation for on-site loss of agricultural land is feasible.

Similarly, the entire City of Fontana is planned for urban development pursuant to the General Plan. Therefore, retention of agricultural lands within the City would be contrary to the planned uses in the area, and would also generate land use conflicts with adjacent urban development, as would be the case for the project site.

Off-site mitigation measures considered include funding and/or purchasing agricultural conservation easements, purchasing credits from an established agricultural farmland mitigation bank, and contributing agricultural land or equivalent funding to an organization that provides for the preservation of farmland in California. However, considering the constraints of the current General Plan, urbanization of the surrounding area, the quality of soil for farmland, and the economic constraints of continuing agricultural use in the City and the surrounding region, off-site mitigation within the City and the County would not be effective as a long-term mitigation strategy and is considered to be economically infeasible. Given the existing economic and regulatory constraints, no off-site mitigation is feasible for conversion of farmland to non-agricultural uses.

Potential off-site mitigation options to reduce the impacts of the proposed project on State-wide loss of agricultural land are considered infeasible for several reasons. First, the City has not adopted an agricultural land mitigation program and furthermore, under the existing General Plan the majority of remaining farmlands within the City are to be converted to urban uses. Second, funding, contributing and/or purchasing off-site agricultural conservation easements or similar instruments, for example Williamson Act contracts, is infeasible given the City's minimal level of existing agricultural operations, limited supply of suitable farm land, population growth and economic development and impacts on agriculture associated therewith, all of which contribute to a situation where existing viable agricultural land occurs in locations

that are not suitable for agricultural practices. Future planned urban development in the City of Fontana and the southern California region is anticipated to result in the conversion of agricultural uses to non-agricultural uses that would substantially reduce overall agricultural productivity and acreage of agricultural land.

Nonetheless, potential off-site mitigation options do exist that could reduce the impacts of the proposed project on State-wide loss of agricultural land. As such, the following mitigation measures are provided to reduce such impacts to the extent feasible:

Mitigation Measure B-1: Prior to future project approval, for the on-site land that is mapped as Unique Farmland, the project proponent shall allow agricultural activities to continue or resume on such farmland for a period of time as long as practicable until development of such land pursuant to the project, thereby allowing agricultural use up to and until the land is prepared for development and/or development-related activities pursuant to the project;

Mitigation Measure B-2: Prior to issuance of a grading or building permit, whichever occurs first, the project proponent shall complete of one or more of the following measures to mitigate the loss of agricultural land before conversion:

- For on-site land that is mapped as Unique Farmland, the project proponent shall make displaced topsoil available to less productive agricultural lands in the surrounding region, including on similarly mapped agricultural land within San Bernardino County or within the San Joaquin Valley (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, or Kern County). Such dispersion of displaced topsoil can add productivity and yield to other farmland;

- For on-site land that is mapped as Unique Farmland and designated in the project as Open Space/Utility Corridor totaling approximately 43 acres, subject to existing utility easements and restrictions and City trails and setbacks, preserve such land for agricultural uses; and

- For on-site land that is not mapped as Unique Farmland or other farmland designation and is designated in the project as Open Space/Utility Corridor totaling approximately 44 acres, subject to existing utility easements and restrictions and City trails and setbacks, dedicate such land for agricultural uses.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed project would accelerate the conversion of agricultural lands and loss of agricultural uses within the City and in the region. The loss of agricultural lands is considered significant on the project site. Although mitigation provided above could potentially offset the loss of agricultural land on-site, considering the constraints of the current General Plan, urbanization of the surrounding area, the quality of soil for farmland, and the economic constraints of continuing agricultural use in the City and the surrounding region, impacts in this regard are conservatively concluded to remain significant and unavoidable.

As such, if the City of Fontana approves the project, the City shall be required to cite their findings in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
C. AIR QUALITY

1. INTRODUCTION

This section addresses potential effects on air quality associated with air emissions generated by the construction and operation of the proposed Westgate Specific Plan. The analysis also addresses the consistency of the proposed project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan, the County of San Bernardino and the City of Fontana General Plans. The analysis of project-generated air emissions focuses on whether the proposed project would cause exceedance of an ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, assumptions, and model outputs used in the analysis are contained in Appendix B of this Draft EIR.

The proposed Westgate Specific Plan is located on mostly undeveloped land in the northwestern part of the City of Fontana in western San Bernardino County. The project site is situated adjacent to Interstate 15 (I-15) and State Route 210 (SR-210). The project site location, in a regional and a local context, is illustrated in **Figure 4.C-1**, *Project Vicinity Map*.

2. ENVIRONMENTAL SETTING

a. Air Pollutants

Air pollutant emissions within the South Coast Air Basin (Basin) are generated from stationary, mobile, and natural sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples are boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, portable generators, lawn mowers, agricultural fields, landfills, and consumer products such as barbeque lighter fluid and hair spray. Construction activities that create fugitive dust such as excavation and grading also contribute to area source emissions. Mobile sources refer to emissions from on- and off-road motor vehicles, including tailpipe and evaporative emissions. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, trains, and construction equipment. Mobile sources account for the majority of the air pollutant emissions within the air basin. Air pollutants can also be generated by the natural environment such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

To protect the public health and welfare, the federal and state governments have identified five criteria air pollutants, a host of air toxics, and have established ambient air quality standards through the Federal Clean Air Act (CAA) and the California Clean Air Act. (CCAA) The air pollutants for which federal and state standards have been promulgated and which are most relevant to air quality planning and regulation in the air basins include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), suspended particulate matter (PM), sulfur dioxide (SO_2), and lead (Pb).

Air pollutants are typically classified as primary or secondary pollutants. Carbon monoxide, nitrogen dioxide, particulate matter, sulfur dioxide, and lead are considered primary pollutants because they are emitted directly into the atmosphere. Ozone is considered a secondary pollutant because it is formed through a photochemical reaction in the atmosphere with volatile organic compounds (VOCs) and nitrogen oxides (NO_X) which in the presence of sunlight produces O_3.

Carbon Monoxide: a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, and motor vehicles operating at slow speeds are the primary source of CO in the Basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

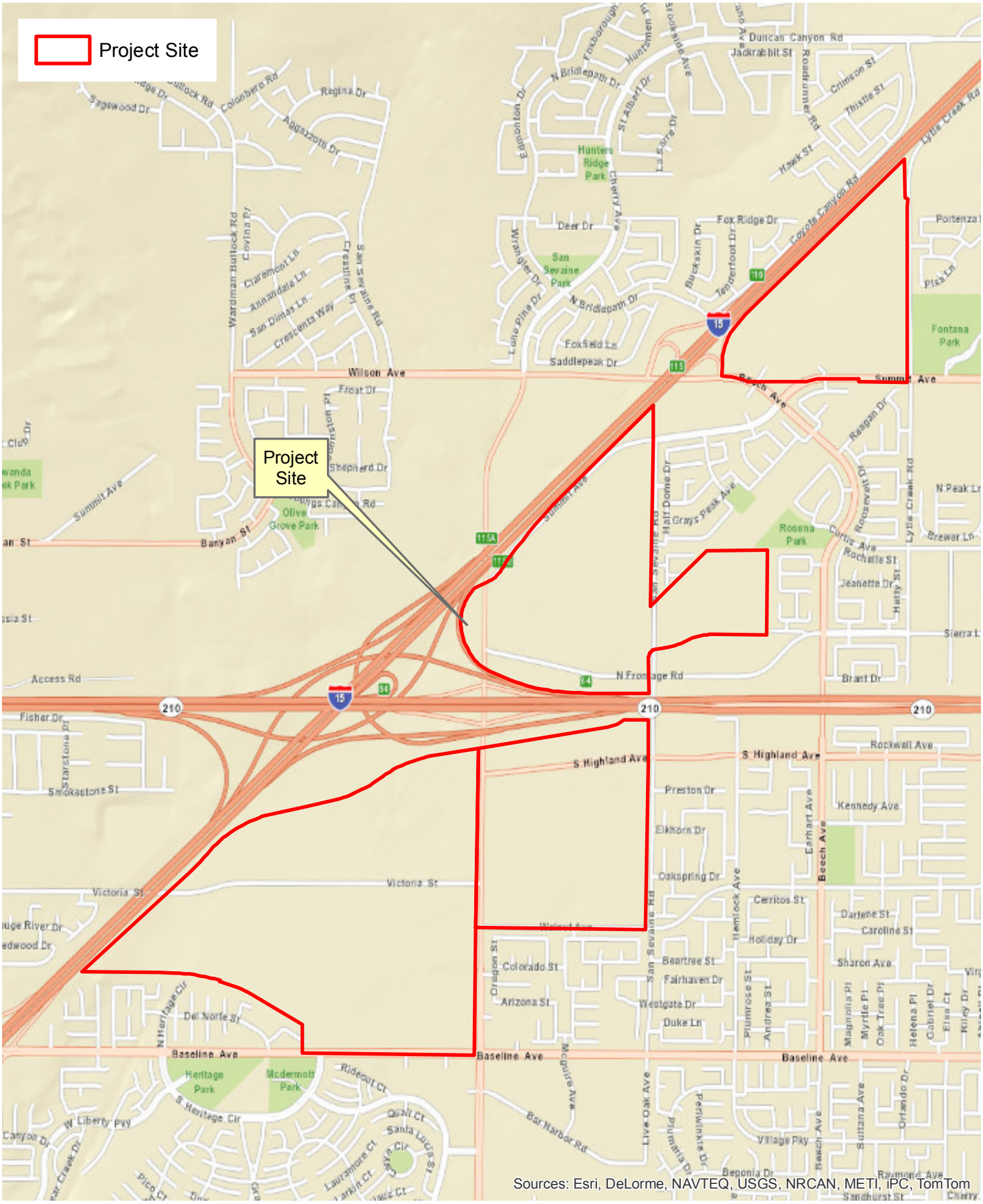
Nitrogen Dioxide: is a reddish-brown gas with a pungent and irritating odor. It transforms in the air to form gaseous nitric acid and toxic organic nitrates. NO_2 also plays a major role in atmospheric reactions that produce ground-level ozone, a major component of smog. It is also a precursor to nitrates, which contribute to increased respirable particle levels in the atmosphere.

Respirable Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$): extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

Sulfur dioxide: a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. Although sulfur dioxide concentrations have been reduced to levels well below state and national standards, further reductions are desirable because SO_2 is a precursor to sulfates which can also affect human health. Sulfur dioxide converts rapidly to sulfates, a particulate formed through the photochemical oxidation of SO_2, within California due to regional meteorological features.

Lead: occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basins. The use of leaded gasoline is no longer permitted for on-road motor vehicles; therefore, most lead combustion emissions are currently associated with off-road vehicles such as racecars and some jet fuels. Other sources of lead occur in the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Toxic Air Contaminants (TACs): TACs are a diverse group of air pollutants that can affect human health, but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. The California Air Resources Board (CARB) has designated nearly 200 compounds as TACs. The Unites States Environmental Protection Agency (USEPA) has assessed this expansive list of toxics and identified 21 TACs as Mobile Source Air Toxics (MSATs). MSATs are compounds emitted from highway vehicles and nonroad equipment, through fuel evaporation and combustion, engine wear, or impurities in oil and gas. USEPA also extracted a subset of these 21 MSAT compounds that it now labels as the six priority MSATs: benzene, formaldehyde, acetaldehyde, diesel particulate matter/diesel exhaust organic gases,



PCR

0 2,000 4,000 Feet

Project Vicinity Map

Westgate Specific Plan Project

Source: ESRI Street Map, 2010 ; PCR Services Corporation, 2012.

FIGURE

4.C-1

This page is intentionally blank.

acrolein, and 1,3-butadiene. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, the most important being particulate matter from diesel-fueled engines.

b. Health Effects of Air Pollutants

Carbon Monoxide: Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes. Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities.

Nitrogen Dioxide: Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children."[1] In animals, exposure to levels of NO_2 considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO_2.

Particulate Matter: A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.

[1] *California Air Resources Board, "Nitrogen Dioxide – Overview," http://www.arb.ca.gov/research/aaqs/caaqs/no2-1/no2-1.htm. Accessed July 2014.*

Sulfur Dioxide: A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor. The effects of sulfate exposure at levels above the standard include the aggravation of asthmatic symptoms, an increased risk of cardio-pulmonary disease, and a decrease in respiratory function.

Lead: Fetuses, infants, and children are more sensitive than others to the adverse effects of exposure to Pb. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death, although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.

Ozone: Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be most susceptible to ozone effects. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities. Ozone exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Volatile Organic Compounds: VOCs are carbon-containing compounds that typically evaporate into the air where they can react with other chemicals. VOCs contribute to the formation of smog, and in some cases may themselves be toxic. Because of the number of compounds that are included in the term VOC, the health effects of the individual gases are not discussed in this document. VOCs often have an odor and some examples including chemicals in gasoline, alcohol and the solvents used in paints.

Odors: The science of odor as a health concern is still new. Merely identifying the hundreds of VOCs that cause offensive odors poses a big challenge. Odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

c. Regulatory Framework

Air quality within the City of Fontana is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the air basin are discussed below.

(1) US Environmental Protection Agency (USEPA)

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the EPA to establish National Ambient Air Quality Standards (NAAQS), with states retaining the option to adopt more stringent standards or to include other specific pollutants. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The CAA (and its subsequent amendments) requires each State to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The SIP is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA. Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions) of the CAA apply to the development and operations of the proposed project.

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: O_3, NO_2, SO_2, PM_{10}, CO, and Pb. **Table 4.C-1** *Ambient Air Quality Standards*, shows the NAAQS currently in effect for each criteria pollutant. The NAAQS were amended in July 1997 to include an 8-hour standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. The Basin fails to meet national standards for O_3 (for both the 1-hour and 8-hour standard), PM_{10} and $PM_{2.5}$, and therefore is considered a federal "non-attainment" area for these pollutants. The CAA sets certain deadlines for meeting the NAAQS within the Basin including: 1-hour O_3 by the year 2010; 8-hour O_3 by the year 2021; and PM_{10} by the year 2006. Nonattainment designations are categorized into seven levels of severity: basic; marginal; moderate; serious; severe-15;[2] severe-17; and

[2] *The "-15" and "-17" designations reflect the number of years within which attainment must be achieved.*

extreme. **Table 4.C-2**, *South Coast Air Basin Attainment Status*, lists the criteria pollutants and their relative attainment status.

Title II of the CAA pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

(2) California Environmental Protection Agency (CalEPA)

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS are set at a level protective of human health, particularly that of infants and children, and incorporate an adequate margin of safety.[3] The CAAQS incorporate additional standards for most of the criteria pollutants and include set standards for other pollutants recognized by the State. In general, the California standards are more health protective than NAAQS. California has also set standards for $PM_{2.5}$, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in compliance with the California standards for sulfates, hydrogen sulfide, and vinyl chloride, but does not meet the California standard for visibility reducing particles. Table 4.C-1 details the current NAAQS and CAAQS, and Table 4.C-2 provides the Basin's attainment status with respect to federal and State standards.

(3) California Air Resources Board

The CARB, a part of the CalEPA, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets state CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of the SIPs, and works closely with the federal government and the local air districts.

The CARB's statewide comprehensive air toxics program was established in the early 1980's. The Toxic Air Contaminant Identification and Control Act (AB 1807) created California's program to reduce exposure to air toxics. TACs are airborne substances that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities.

In 1993, the AB 1807 program was amended to include the identification and control of TACs (AB 2728). Specifically, AB 2728 required the CARB to identify 188 hazardous air pollutants (HAPs) as TACs. Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous

[3] *California Air Resources Board, "Final Report – Adequacy of California Ambient Air Quality Standards," http://www.arb.ca.gov/research/aaqs/caaqs/ad-aaqs/ad-aaqs.htm. Accessed July 2014.*

Air Pollutants (NESHAPS) Program and require Title V permitting which requires implementation of Maximum Achievable Control Technologies (MACTs) to reduce emissions of HAPs.

In September 1987, the California Legislature established the AB 2588 air toxics "Hot Spots" program. It requires facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. The SCAQMD has determined that the significance criterion for cancer health risks is a ten in million increase in the chance of developing cancer. The significance of non-cancer (acute and chronic)

Table 4.C-1

Ambient Air Quality Standards [a]

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.0075 ppm (147 µg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter ($PM_{2.5}$)[8]	24 Hour	No Separate State Standard		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	—
Nitrogen Dioxide (NO_2)[9]	Annual Arithmetic Mean	0.030 ppm (56 µg/m³)	Gas Phase Chem-iluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (338 µg/m³)		100 ppb (188 µg/m³)	None	
Sulfur Dioxide (SO_2)[10]	24 Hour	0.04 ppm (105 µg/m³)	Ultraviolet Fluorescence	0.14 (for certain areas)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)[9] —
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	1 Hour	0.25 ppm (655 µg/m³)		75 ppb (196 µg/m³)	—	
Lead[11,12]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average[11]	--		0.15 µg/m³		

Table 4.C—1 (Continued)

Ambient Air Quality Standards [a]

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Visibility Reducing Particles	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.		**No Federal Standards**		
Sulfates (SO_4)	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

[1] *California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended 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 averages or 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 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 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 procedure 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 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 PM2.5 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. [9]To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm.*

[10] *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 75 ppb.*

[11] *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.*

[12] *National lead standard, rolling 3-month average: final rule signed October 15, 2008.*

Source: California Air Resources Board (06/04/2013).

Table 4.C-2

South Coast Air Basin Attainment Status (San Bernardino County)

Pollutant	National Standards	California Standards
Ozone (1-hour standard)	N/A [a]	Non-attainment
Ozone (8-hour standard)	Non-attainment (Extreme)	Non-attainment
Carbon Monoxide	Attainment	Attainment [b]
Nitrogen Dioxide	Attainment	Attainment [b]
Sulfur Dioxide	Attainment	Attainment [b]
PM_{10} (24-hour standard)	Attainment	Non-attainment
PM_{10} (annual standard)	N/A [c]	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Lead	Attainment	Attainment [b]
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment [b]
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride	N/A	N/A [d]

N/A = not applicable

[a] *The NAAQS for 1-hour ozone was revoked on June 15, 2005 for all areas except Early Action Compact areas.*

[b] *An air basin is designated as being in attainment for a pollutant if the standard for that pollutant was not violated at any site in that air basin during a three year period.*

[c] *The NAAQS for annual PM_{10} was revoked on September 21, 2006.*

[d] *In 1990 the CARB identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the CARB does not monitor or make status designations for this pollutant.*

Source: U.S. Environmental Protection Agency Region 9 (February 2014) and California Air Resources Board (August 2014).

risks is evaluated in terms of hazard indices (HI) for different endpoints. The SCAQMD threshold for non–cancer risk for both acute and chronic HI is 1.0. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan. In 2000, the CARB adopted a diesel risk reduction plan to reduce diesel particulate matter emissions and the associated health risk. The goal of the plan is to reduce diesel particulate matter emissions and the associated health risk by 75 percent in 2010 and by 85 percent by 2020.

(4) California Air Resources Board On-Road and Off-Road Vehicle Rules

In 2004, the CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. 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 5 minutes at any given time.

In 2008 CARB approved the Truck and Bus regulation to reduce PM and NO_x emissions from existing diesel vehicles operating in California. The requirements were amended in December 2010, and apply to nearly all diesel fueled trucks and busses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. For

the largest trucks in the fleet, those with a GVWR greater than 26,000 pounds, there are two methods to comply with the requirements. The first way is for the fleet owner to retrofit or replace engines, starting with the oldest engine model year, to meet 2010 engine standards, or better. This is phased over 8 years, starting in 2015 and would be fully implemented by 2023, meaning that all trucks operating in the State subject to this option would meet or exceed the 2010 engine emission standards for NO_x and PM by 2023. The second option, if chosen, requires fleet owners, starting in 2012, to retrofit a portion of their fleet with diesel particulate matter filters (DPFs) achieving at least 85 percent removal efficiency, so that by January 1, 2016 their entire fleet is equipped with DPFs. However, DPFs do not lower NO_x emissions. Thus, fleet owners choosing the second option must still comply with the 2010 engine emission standards for their trucks and busses by 2020.

In addition to limiting exhaust from idling trucks, CARB recently 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 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. Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance January 1, 2014. Each fleet must demonstrate compliance through one of two methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS installation) be fully implemented by 2023 in all equipment in large and medium fleets and across 100 percent of small fleets by 2028.

(5) South Coast Air Quality Management District

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles. This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the nondesert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. San Bernardino County is a subregion of the SCAQMD jurisdiction. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

The Westgate Specific Plan project could be subject to the following South Coast Air Quality Management District rules and regulations:

Regulation IV – Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events.

- **Rule 402 – Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance or annoyance to businesses,

property or the public. The proposed project does not plan on discharging any contaminants in quantities to cause injury to the public or property. Project-specific modeling was conducted to determine the health risk of TACs emitted from the project, see criterion b), below for a thorough discussion. The project will comply with Rule 402.

- **Rule 403 – Fugitive Dust:** This rule requires that the applicant prevent, reduce or mitigate fugitive dust emissions from the project site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM_{10} emissions to less than 50 $\mu g/m^3$ and restricts the tracking out of bulk materials onto public roads. Additionally, the applicant must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the US EPA. The proposed project will comply with Rule 403.

Regulation XI – Source Specific Standards: Regulation XI sets emissions standards for different sources.

- **Rule 1113 – Architectural Coatings:** This rule limits the amount of volatile organic compounds from architectural coatings and solvents, which lowers the emissions of odorous compounds.

SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD, works cooperatively with CARB, SCAG, county transportation commissions, local governments, and other federal and state government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMP) to meet the CAAQS and NAAQS. SCAQMD and CARB have adopted the 2012 AQMP which incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and updated emission inventory methodologies for various source categories.[4] The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012. Control measure IND-01 was approved for adoption and inclusion in the Final 2012 AQMP at the February 1, 2013 Governing Board meeting.

Therefore, the 2012 AQMP is the most appropriate plan to use for consistency analysis. The AQMP builds upon other agencies' plans to achieve federal standards for air quality in the Basin. It incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. The 2012 AQMP builds upon improvements in previous plans, and includes new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. In addition, it highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the time frames allowed under the federal Clean Air Act.

The 2012 AQMP's key undertaking is to bring the Basin into attainment with NAAQS for 24-hour PM2.5 by 2014. It also intensifies the scope and pace of continued air quality improvement efforts toward meeting the

[4] *South Coast Air Quality Management District, 2012 Air Quality Management Plan, http://www.aqmd.gov/aqmp/2012aqmp/index.htm.*

2023 8-hour ozone standard deadline with new measures designed to reduce reliance on the CAA Section 182(e)(5) long-term measures for NO_X and VOC reductions. SCAQMD expects exposure reductions to be achieved through implementation of new and advanced control technologies as well as improvement of existing technologies.

The control measures in the 2012 AQMP consist of four components: 1) Basin-wide and Episodic Short-term PM2.5 Measures; 2) Contingency Measures; 3) 8-hour Ozone Implementation Measures; and 4) Transportation and Control Measures provided by the Southern California Association of Governments (SCAG). The Plan includes eight short-term PM2.5 control measures, 16 stationary source 8-hour ozone measures, 10 early action measures for mobile sources and seven early action measures are proposed to accelerate near-zero and zero emission technologies for goods movement related sources, and five on-road and five off-road mobile source control measures. In general, the District's control strategy for stationary and mobile sources is based on the following approaches: 1) available cleaner technologies; 2) best management practices; 3) incentive programs; 4) development and implementation of zero- near-zero technologies and vehicles and control methods; and 5) emission reductions from mobile sources.

The SCAQMD published a *CEQA Air Quality Handbook* (the Handbook) in November 1993 to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. The Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. However, the SCAQMD is currently in the process of replacing the Handbook with the Air Quality Analysis Guidance Handbook. While this process is underway, the SCAQMD recommends that the lead agency avoid using the screening tables in the Handbook's Chapter 6, because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory, and the trip generation characteristic of the land uses identified in these screening tables were based on the fifth edition of the ITE Trip Generation Manual, instead of the most current sixth edition. Additionally, the lead agency should avoid using the on-road mobile source emission factors in Table A9-5-J1 through A9-5-L in the Handbook. The SCAQMD instead recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CALEEMOD) model. To assist the lead agency, this analysis follows SCAQMD's recommendations.

In addition, the SCAQMD has published (in June 2003) a document called "Localized Significance Threshold Methodology" that is intended to provide voluntary guidance for lead agencies in analyzing localized air quality impacts from proposed projects.[5] In October 2006, the SCAQMD adopted additional guidance regarding $PM_{2.5}$ in a document called "Final – Methodology to Calculate Particulate Matter $PM_{2.5}$ and $PM_{2.5}$ Significance Thresholds."[6] These documents were also used in the preparation of this analysis.

The SCAQMD has also adopted land use planning guidelines in the May 2005 "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning"[7] which, like the CARB Handbook, also considers impacts to sensitive receptors from facilities that emit TACs. SCAQMD's distance recommendations are the same as those provided by CARB (e.g., the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely

[5] *See http://www.aqmd.gov/ceqa/handbook/LST/LST.html.*

[6] *See http://www.aqmd.gov/ceqa/handbook/pm2_5/pm2_5.html.*

[7] *See http://www.aqmd.gov/prdas/aqguide/aqguide.html.*

on design and distance parameters to manage potential health risk. These guidelines are voluntary initiatives recommended for consideration by local planning agencies.

(6) Southern California Association of Governments

SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the federally designated metropolitan planning organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality–related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and state mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes through the year 2015, and beyond. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

On April 4, 2012, SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Using growth forecasts and economic trends, the RTP provides a vision for transportation throughout the region for the next 20 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 SCS is a newly required element of the RTP, which integrates land use and transportation strategies to achieve CARB emissions reduction targets. The inclusion of the SCS is required by Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. The RTP/SCS successfully achieves and exceeds the greenhouse gas emission-reduction targets set by CARB by achieving a 9 percent reduction by 2020 and 16 percent reduction by 2035 compared to the 2005 level on a per capita basis. This RTP/SCS also meets criteria pollutant emission budgets set by the EPA.

The 2012–2035 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the federal CAA. Even with ongoing aggressive control strategies, ever more stringent national O_3 standards require further NOx emission reductions in the SCAG region. In the Basin, for example, it is estimated that NOx emissions will need to be reduced by approximately two-thirds in 2023 and three-quarters in 2030. Most sources of NOx emissions, cars and factories, are already controlled by over 90%. The level of emission reduction required is so significant that 2030 emissions forecasted from just three sources—ships, trains, and aircraft—would lead to O_3 levels near the federal standard. To accomplish the reduction required to meet O_3 standards, the 2012–2035 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero

emission transportation technologies in the 2023–2035 time frame and clear steps to move toward this objective.

(7) San Bernardino Associated Governments

The San Bernardino Associated Governments (SANBAG), a subregional organization under SCAG, was created in large part to organize all of the local municipalities within the County to maintain its circulation system. SANBAG effectively acts as the transportation planning agency of the County and is responsible for the coordination of roadway improvements, public transportation, and congestion management. Under Proposition 111, urban regions with populations of more than 50,000 are required to adopt a congestion management program (CMP). As the designated Congestion Management Agency, SANBAG adopted the County's CMP in June 1990. Under the CMP, all managed segments are required to operate at a level of service (LOS) of E or better, with the exception of roadway segments that have been designated LOS F in the 2001 CMP.

(8) City of Fontana

(a) City of Fontana General Plan Air Quality Element

The City of Fontana sits at the foot of two mountain ranges: the San Gabriel Mountains to the west and the San Bernardino Mountains to the east. The mountains effectively trap air pollutants and prevent their dispersion. The City's industries and heavy traffic further exacerbate the problem by introducing large amounts of pollutants into the region. Thus, the City experiences a unique combination of air quality issues. Adopted in October 2003, the General Plan provides a vision and blueprint for the City's long-term physical development. In addition to the seven elements mandated by the State, the General Plan includes an optional Air Quality Element, which outlines the City's existing air quality conditions, the natural and anthropogenic factors which impact air quality, and goals, policies, and actions as related to the regulation of air quality. The proposed Westgate Specific Plan is subject to the a number of City goals and policies addressing impacts related to air quality. An analysis of the proposed project's consistency with these goals and policies is provided below under Project Impacts.

(9) Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of air pollution than are the population at large. While the ambient air quality standards are designed to protect public health and are generally regarded as conservative for healthy adults, there is greater concern to protect adults who are ill or have long-term respiratory problems, and young children whose lungs are not fully developed. According to CARB, sensitive receptors include children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. The SCAQMD identify the following as locations that may contain a high concentration of sensitive receptors; long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, childcare centers, and athletic facilities.

The proposed Specific Plan is located within the vicinity of residential and educational uses. The nearest sensitive receptors to the Specific Plan site are adjacent single-family residences along Ponte Court and Palladio Lane north of Sierra Lakes Parkway east of the Specific Plan site. A more detailed discussion and map of nearby sensitive receptors can be found in *Existing Conditions*.

d. Existing Conditions

(1) Regional Context

The proposed project is located within the South Coast Air Basin (Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Basin, as the Basin is a coastal plain with connecting broad valleys and low hills.

The southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Basin, making it an area of high pollution potential.

The greatest air pollution impacts throughout the Basin occur from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day. Ozone concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in southern California.

The SCAQMD has released a draft final Basin-wide air toxics study (MATES III, Multiple Air Toxics Exposure Study, May 2008). The MATES III Study represents one of the most comprehensive air toxics studies ever conducted in an urban environment. The Study was aimed at estimating the cancer risk from toxic air emissions throughout the Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Basin. The Study concluded that the average carcinogenic risk from air pollution in the Basin is approximately 1,200 in one million. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 85 percent of the risk is attributed to diesel particulate emissions, approximately 10 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde), and approximately 5 percent of all carcinogenic risk is attributed to stationary sources (which include industries and other certain businesses, such as dry cleaners and chrome plating operations).

As part of the MATES III study, the SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES III map is provided in **Figure 4.C-2**, *Total Cancer Risk for Project Vicinity*. As shown therein, excess cancer risk due to airborne toxic air contaminants ranges from 500 to 1,200 cancers per

million in the city, and the maximum cancer risk for the vicinity of the proposed project is estimated at 942 cancers per million,. Generally, the risk from air toxics is lower near the coastline: and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

The CARB also prepares a series of maps that show regional trends in estimated outdoor inhalable cancer risk from air toxic emissions. The Year 2010 San Bernardino - Riverside map, which is the most recently available map to represent existing conditions, shows cancer risk ranging from 100 to 500 cancers per million, which is slightly lower than the SCAQMD's risk maps.[8]

The data from the SCAQMD and the CARB provide a slightly different range of risk. This difference is primarily related to the fact that the SCAQMD risk is based on monitored pollutant concentrations and the CARB risk is based on dispersion modeling and emission inventories. Regardless, the SCAQMD and the CARB data shows that there is an inherent health risk associated with living in urbanized areas of the Basin, where mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors to the overall risk.

(2) Local Area Conditions

(a) Existing Pollutant Levels at Nearby Monitoring Stations

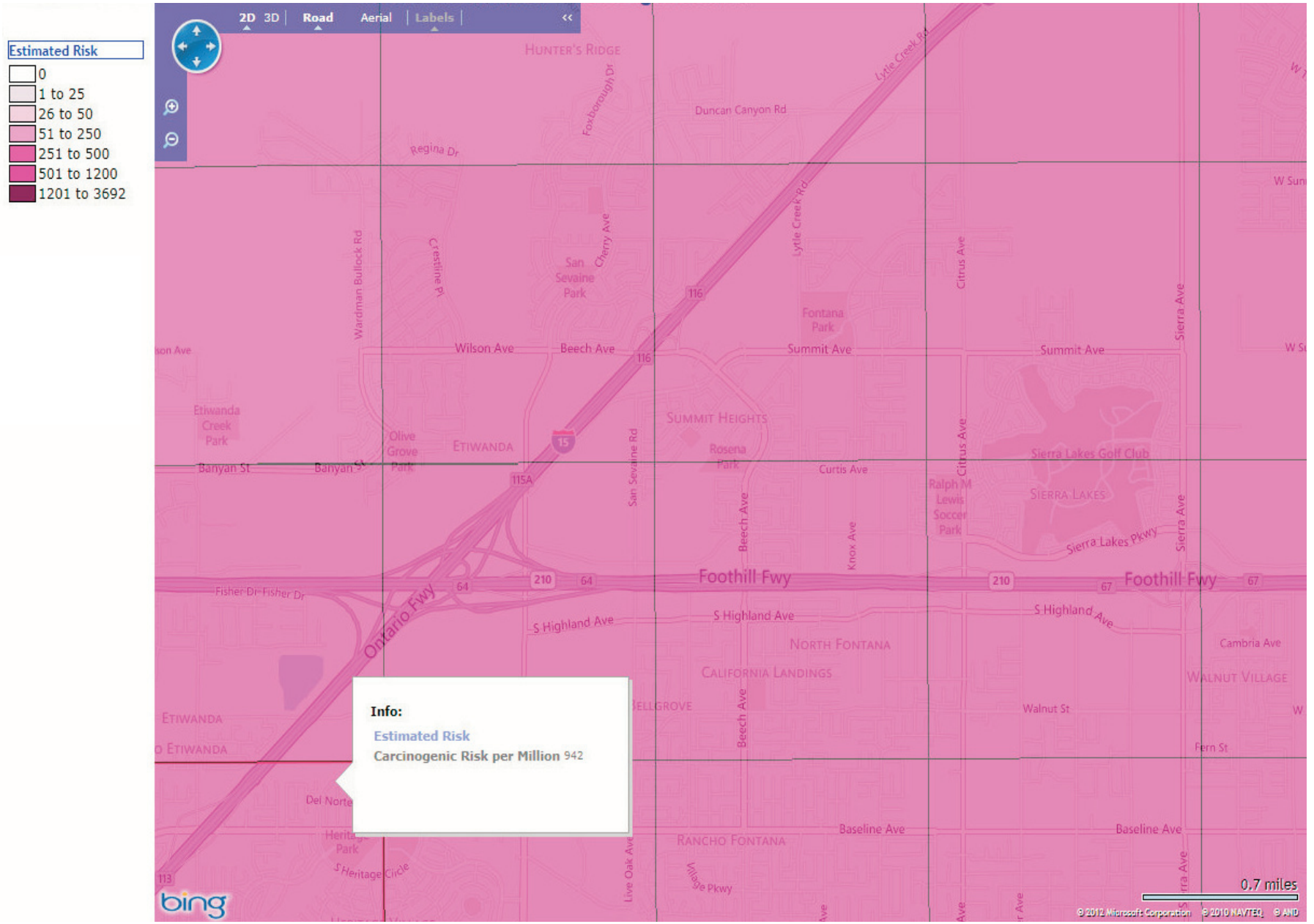
The SCAQMD maintains a network of air quality monitoring stations located throughout the South Coast Air Basin and has divided the Basin into air monitoring areas. The project site is located within Source Receptor Area Number 34 (Central San Bernardino Valley 1). The monitoring station most representative of the project site is the Fontana Monitoring Station, approximately 1.5 miles south. Criteria pollutants monitored at this station include O_3, CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$. The nearest monitoring station that monitors lead is the San Bernardino Monitoring Station (SRA 34, Central San Bernardino Valley 2). The most recent data available from these monitoring stations encompass the years 2008 to 2012.[9] The data, shown in **Table 4.C-3**, *Pollutant Standards and Ambient Air Quality Data*, show the following pollutant trends:

O_3. During the 2008 to 2012 reporting period, the maximum 1-hour ozone concentration was recorded in 2008 at 0.162 ppm. During this period, the California standard of 0.09 ppm was exceeded between 28 and 60 times annually, with the highest number of exceedances in 2012. The National standard of 0.12 ppm was exceeded between 2 and 35 times during the reporting period. The maximum eight-hour ozone concentration recorded during the reporting period was 0.128 ppm, reported in 2009. During the reporting period, the California standard of 0.07 ppm was exceeded between 53 and 85 times, with the greatest number of exceedances in 2012. The National 8-hour average standard of 0.08 ppm was exceeded between 33 and 58 times, with the highest number of exceedances occurring in 2008. In 2012, the National 8-hour average standard was lowered to 0.075 ppm and it was exceeded 62 times in 2012.

NO_2. The highest 1-hour concentration of NO_2 was recorded in 2009 and was 0.11 ppm. The highest annual arithmetic mean was 0.0235 ppm, recorded in reporting year 2009. Neither the California nor the National NO_2 standards were exceeded during the reporting period.

[8] *California Air Resources Board, Cancer Inhalation Risk: Local Trend Maps, http://www.arb.ca.gov/ch/communities/hlthrisk/cncrinhl/rskmapvwtrend.htm.400.*

[9] *South Coast Air Quality Management District, Historical Data by Year, http://www.aqmd.gov/smog/historicaldata.htm.*



PCR

N

0 0.7 Miles

Total Cancer Risk for Project Vicinity

Westgate Specific Plan Project

Source: South Coast Air Quality Management District, 2012.

FIGURE

4.C-2

This page is intentionally blank.

Table 4.C-3

Pollutant Standards and Ambient Air Quality Data[a]

Pollutant/Standard	2008	2009	2010	2011	2012
Ozone					
O_3 (1-hour)					
Maximum Concentration (ppm)	0.162	0.142	0.143	0.144	0.142
Days > CAAQS (0.09 ppm)	55	45	28	39	60
Days > NAAQS (0.12 ppm)	35	3	2	5	5
O_3 (8-hour)					
Maximum Concentration (ppm)	0.124	0.128	0.1	0.124	0.11
4th High 8-hour Concentration (ppm)	0.111	0.1	0.094	0.105	0.106
Days > CAAQS (0.07 ppm)	82	65	55	53	85
Days > NAAQS (0.08 ppm or 0.075 (2012))	58	48	33	39	62
Nitrogen Dioxide					
NO_2 (1-hour)					
Maximum Concentration (ppm)	0.1	0.11	0.072	0.076	0.069
Days > CAAQS (0.25 ppm)	0	0	0	0	0
NO_2 (Annual)					
Annual Arithmetic Mean (0.053 ppm)	0.0207	0.0235	0.023	0.021	0.022
Carbon Monoxide					
CO (1-hour)					
Maximum Concentration (ppm)	2	2	3	--	--
Days > CAAQS (20 ppm)	0	0	0	--	--
Days > NAAQS (35 ppm)	0	0	0	--	--
CO (8-hour)					
Maximum Concentration (ppm)	1.9	1.5	1.4	1.1	1.1
Days > CAAQS (9 ppm)	0	0	0	0	0
Days > NAAQS (9 ppm)	0	0	0	0	0
Sulfur Dioxide					
SO_2 (1-hour)					
Maximum Concentration (ppm)	0.01	0.01	0.007	0.012	0.012
Days > CAAQS (0.25 ppm)	0	0	0	0	0
SO_2 (24-hour)					
Maximum Concentration (ppm)	0.003	0.002	0.002	--	--
Days > CAAQS (0.04 ppm)	0	0	0	--	--
Days > **N**AAQS (0.14 ppm)	0	0	0	--	--
SO_2 (Annual)					
Annual Arithmetic Mean (0.03 ppm)	0.0018	--	--	--	--
Particulate Matter (PM_{10})					
PM_{10} (24-hour)					
Maximum Concentration ($\mu g/m^3$)	75	75	62	84	67

Table 4.C-3 (Continued)

Pollutant Standards and Ambient Air Quality Data[a]

Pollutant/Standard	2008	2009	2010	2011	2012
Days > CAAQS (50 μg/m³)	14(23%)	13(21.7%)	9(17%)	4(7%)	9
Days > NAAQS (150 μg/m³)	0	0	0	0	0
PM_{10} (Annual Average)					
Annual Arithmetic Mean (50 μg/m³)	40.3	40.2	33.9	31.8	34.3
Particulate Matter ($PM_{2.5}$)					
$PM_{2.5}$ (24-hour)					
Maximum Concentration (μg/m³)	49	46.4	42.6	60.1	39.9
Days > NAAQS (35 μg/m³)[a]	6(5.4%)	2(1.6)	2(1.8%)	2(1.8%)	3
$PM_{2.5}$ (Annual)					
Annual Arithmetic Mean (15 μg/m³)	15.4	14.3	12	12.6	12.8
Lead[c]					
Maximum 30-day average (μg/m³)	0.02	0.01	0.01	0.008	0.008
Maximum calendar quarter (μg/m³)	0.02	0	0.01	0.007	Not available at this time
Sulfate (24-hour)					
Maximum Concentration (μg/m³)	9.5	6.7	6.3	6.0	4.6
Days > CAAQS (25 μg/m³))	0	0	0	0	0

ppm = parts per million; μg/m³ = micrograms per cubic meter; AAM Annual Arithmetic Mean; n/a = not applicable; -- = Data not available

[a] In September 2006, the 24-hr $PM_{2.5}$ standard was changed from 65 mg/m3 to 35 mg/m3. The data representing days above standard for 2006 apply to the new standard.

[b] Ambient data for airborne lead are not included in this table since the Basin is currently in compliance with State and National standards for lead.

[c] Lead monitoring data are from the San Bernardino Monitoring Station.

Source: South Coast Air Quality Management District, Historical Data by Year, 2008-2012.

CO. The highest 1-hour CO concentration was 3 ppm, reported in 2010 and the highest 8-hour CO concentration was 1.9 ppm, reported in 2008. Neither the California nor the National CO standards were exceeded during the 2008 to 2012 reporting period.

SO_2. The highest 1-hour concentration of SO_2 was 0.0012 ppm, recorded in 2011 and 2012. The highest 24-hour concentrations was 0.003 ppm recorded in 2008. No exceedances of the California or National SO_2 standards were recorded during this reporting period. The highest annual arithmetic mean was 0.0018 ppm recorded in 2008.

PM_{10}. The highest recorded concentration during the period of 2008 to 2012 was 84 micrograms per cubic meter (μg/m³), which was recorded in 2011. During this same time period, the California PM_{10} standard was exceeded between 4 and 14 times annually, with the highest number of exceedances in 2008. The national

PM_{10} standard was not exceeded during this period. PM_{10} is monitored every six days coincident to a national schedule; thus, PM_{10} exceedances are based on the number of days that sampling occurred. The maximum recorded arithmetic mean concentration of 40.3 μg/m³ was recorded in 2008.

$PM_{2.5}$. Maximum $PM_{2.5}$ concentrations varied between 39.9 and 60.1 between 2008 and 2012. During these years the National standard of 35μg/m³ was exceeded between two and six exceedances, with the highest number of exceedances recorded in 2008. The highest annual arithmetic mean was 15.4 μg/m³, recorded in 2008.

Pb. The highest 30-day average concentration of lead was 0.02 μg/m³ recorded in 2008, below the California 1.5 μg/m³ standard. The highest calendar quarter concentration was 0.02, in 2008, below the National 1.5 μg/m³ standard. Data for 2012 (calendar quarter concentration) was not available from the SCAQMD at this time. The data demonstrates that the area is currently in compliance with California and National standards for Pb, as no exceedances were recorded.

Sulfates. The maximum 24-hour concentration of sulfates was 9.5 μg/m³ recorded in 2008, below the 25 μg/m³ State standard. These data confirm that the Basin is currently designated as attainment with respect to the State standard for sulfates.

Visibility Reducing Particles. The Basin is currently designated as "unclassified" with respect to the State standard for visibility reducing particles. Continuous monitoring is not currently performed within the Basin for this standard.

Hydrogen Sulfide. The Basin is currently designated as "unclassified" with respect to the State standard for hydrogen sulfide. The CARB does not perform or require ambient monitoring of this pollutant.

Vinyl Chloride. The Basin is currently designated as "unclassified" with respect to the State standard for vinyl chloride. In 1990, the CARB identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the CARB does not perform or require ambient monitoring for this pollutant.

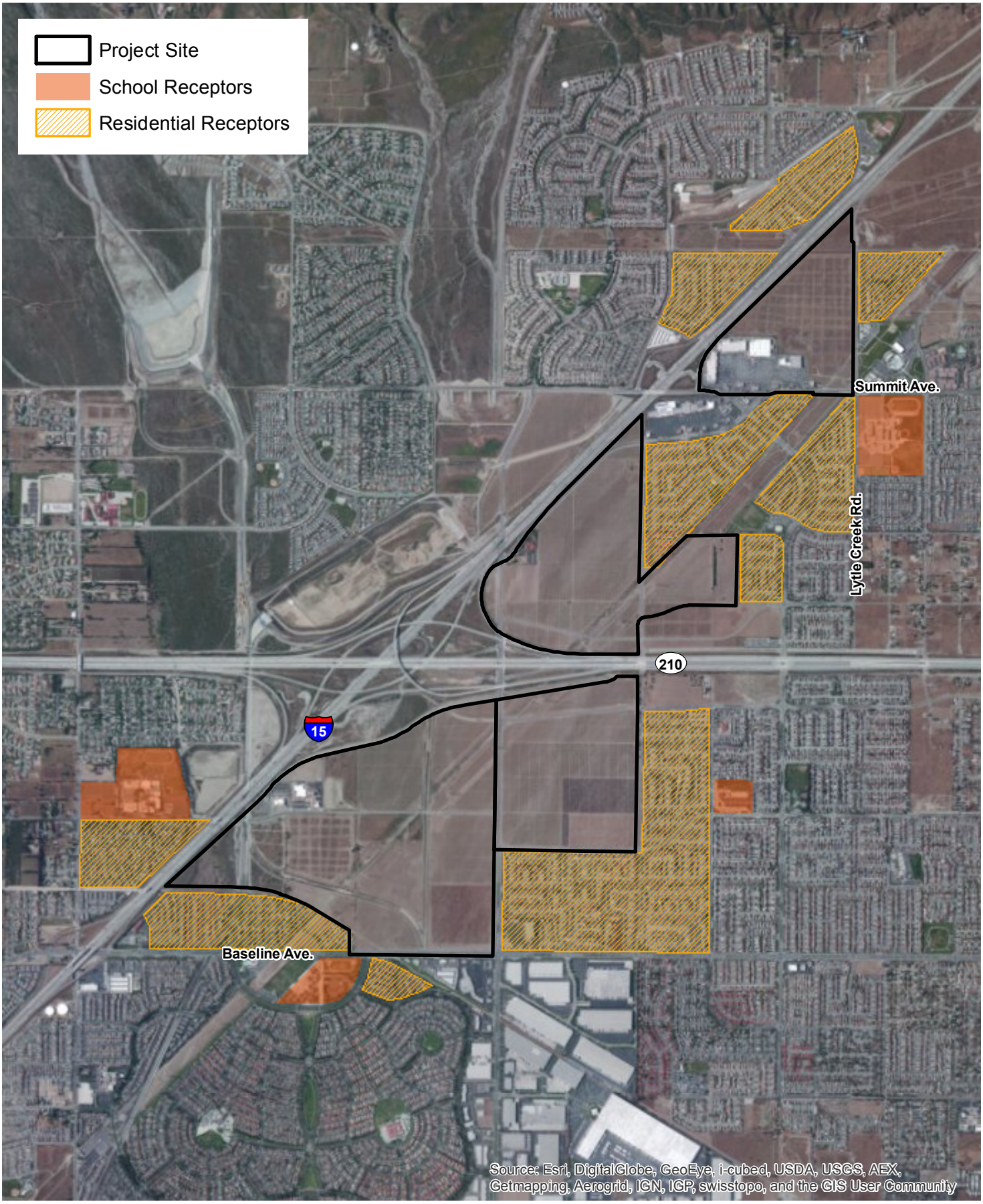
(b) Sensitive Receptors and Locations

As discussed previously, some population groups, including children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to air pollution than others. Sensitive land uses in close proximity to the project site are shown in **Figure 4.C-3**, *Closest Sensitive Receptor Locations*, and include the following:

- Residential units east of the project site:
  - Single-family residences along Turin Way, Toscana Lane, and Pescara Way, approximately 50 feet east of the project site, on the east side of Lytle Creek Road north of Summit Avenue.
  - Single-family residences along Trapetto Drive, Blue Ridge Way, and Half Dome Drive on the east side of San Sevaine Road north of Lyster Avenue, approximately 50 feet east of the project site.

- Single-family residences along Ponte Court and Palladio Lane north of Sierra Lakes Parkway adjacent to the project site.
- Single-family residences along Cory Place, Royal Crest Place, Royal Crest Court, Oak Spring Drive, Elkhorn Drive, and Preston Drive on the east side of San Sevaine Road south of South Highland Avenue, approximately 50 feet east of the project site.
- Single-family residences along Royal Crest Place and Oak Valley Drive near the southeastern intersection of Walnut Street and San Sevaine Road, approximately 75 feet southeast of the project site
- Single-family residences along Oregon Street and Hawaii Way on the east side of Cherry Avenue north of Baseline Avenue, approximately 90 feet east of the project site.

- Residential units south of the project site:
  - Single-family residences along Reagan Drive and Madison Lane on the south side of Summit Avenue west of Lytle Creek Road, approximately 80 feet south of the project site
  - Single-family residences along Idaho Street and Maine Street on the south side of Walnut Street east of Cherry Avenue, approximately 50 feet south of the project site.
  - Single-family residences along Rideout Court on the south side of Baseline Avenue east of South Heritage Circle, approximately 110 feet south of the project site.
  - Single-family residences along Stinson Court, Wake Court, Big Sur Street, Bodega Street, Kittyhawk Street, Webb Court, Bay Street, Las Palmas Drive, and Marysville Place on the south side of the Pacific Electric Bike Trail north of Baseline Avenue, approximately 60 feet south of the project site
- Residential units west of the project site:
  - Single-family residences along Williamson Road on the west side of Freeway 15, approximately 300 feet west of the project site.
  - Single-family residences along Crane Street on the west side of Freeway 15 and Coyote Canyon Road north of Bridlepath Drive, approximately 350 feet west of the project site.
  - Single-family residences along Petunia Street on the west side of Freeway 15 and Coyote Canyon Road north of Roadrunner Road, approximately 350 feet west of project site.
- Summit High School. High School located at the southeast corner of Summit Avenue and Lytle Creek Road, approximately 170 feet east of the project site.
- Heritage Intermediate School. Middle school located on the south side of Baseline Avenue approximately 400 feet to the south of the project site.
- Etiwanda High School. High School located along the north side of Victoria Street approximately 560 feet to the west of the project site



PCR

N

0 2,400 4,800 Feet

Closest Sensitive Receptor Locations

Westgate Specific Plan Project

Source: Aerial Express, 2010; PCR Services Corporation, 2012.

FIGURE

4.C-3

This page is intentionally blank.

3. PROJECT IMPACTS

a. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including air quality. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to air quality would occur if the project would result in one or more of the following:

Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact Statement 4.C-1);

Threshold 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation (refer to Impact Statement 4.C-2);

Threshold 3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (refer to Impact Statement 4.C-3);

Threshold 4: Expose sensitive receptors to substantial pollutant concentrations (refer to Impact Statement 4.C-4); or

Threshold 5: Create objectionable odors affecting a substantial number of people (refer to Impact Statement 4.C-5).

The State CEQA Guidelines (Section 15064.7) provide that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance. The potential air quality impacts of the proposed project are, therefore, evaluated according to thresholds developed by SCAQMD in the *CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook*, and subsequent guidance, discussed below. These thresholds generally incorporate the checklist questions contained in Appendix G of the State *CEQA Guidelines*.

Greenhouse Gas Emissions and related "climate change" issues are addressed in Section 4.F, *Greenhouse Gasses*, of this Draft EIR.

Threshold 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

The SCAQMD is required, pursuant to the CAA to reduce emissions of criteria pollutants for which the Basin is in non-attainment of Federal standards. The future development pursuant to the proposed Specific Plan would be subject to the SCAQMD's 2012 AQMP.[10] The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These

[10] *South Coast Air Quality Management District, AQMD Website, http://www.aqmd.gov/aqmp/2012aqmp/index.htm.*

strategies are developed, in part, based on regional population, housing, and employment projections prepared by SCAG.

With regard to air quality planning, SCAG has prepared the RCPG, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP, and are utilized in the preparation of air quality forecasts and consistency analysis included in the AQMP. Both the RCPG and AQMP strategy incorporate projections from local planning documents.

The 2012 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact of reduced air quality on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment, because this growth is included in the projections used during the preparation of the AQMP. The 2012 AQMP relies on assumptions and data regarding County of San Bernardino growth consistent with the applicable zoning under the existing General Plan. The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by SCAG.

Projects that are consistent with the employment and population projections identified in the Growth Management Chapter of the RCPG prepared by SCAG are considered consistent with the AQMP growth projections, since the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP. SCAG's RCP and Guide provide growth forecasts that are used in the development of air quality-related land use and transportation control strategies. The RCP provided control strategies introduce enforceable measures by which area wide reductions in annual vehicle miles traveled can be achieved. The reduction in vehicle miles traveled correlates with a reduction in emissions of criteria pollutants.

A project is consistent with the AQMP if it is consistent with the applicable rules and regulations and the population, housing and employment assumptions which were used in the development of the AQMP. The 2012 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates SCAG's 2012 RTP/SCS socioeconomic forecast project ions of regional population and employment growth.

Threshold 2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The City of Fontana has not adopted specific significance thresholds for air quality impacts. However, because of the SCAQMD's regulatory role in the Basin, the significance thresholds and analysis methodologies in the SCAQMD *CEQA Air Quality Handbook* guidance document will be used in evaluating project impacts. The SCAQMD has established mass emission thresholds below which it is unlikely that an individual project's incremental increase in emissions could cause or contribute substantially to an exceedance of applicable ambient air quality standards. Based on these criteria, the proposed project would result in a potentially significant impact if any of the following would occur:

(1) Construction Thresholds

A potentially significant impact may occur if regional emissions during construction from both direct and indirect sources would exceed any of the following SCAQMD mass emission threshold levels listed below. If so, air quality dispersion modeling may be used determine if the emissions would cause an exceedance of applicable air quality standards. The numerical thresholds are based on the recognition that the Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to project public health.[11]

- 550 pounds per day CO
- 75 pounds per day of VOC
- 100 pounds per day of NO_X
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$[12]

Exceedance of SCAQMD mass emission thresholds does not explicitly mean an exceedance of applicable air quality standards is expected. Refined air quality dispersion modeling should be performed to predict impacts to ground level ambient pollutant levels.

(2) Operation Thresholds

A potentially significant impact may occur if regional emissions during operations from both direct and indirect sources would exceed any of the following SCAQMD mass emission threshold levels listed below. The numerical thresholds are based on the recognition that the Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to project public health.[13] The SCAQMD has established numeric thresholds for operation in part based on Section 182(e) of the Clean Air Act which identifies 10 tons per year of VOC as a significance level for stationary source emissions in extreme non-attainment areas for ozone.[14] As shown in Table 4.C-2, the Basin is designated as extreme non-attainment for ozone. The SCAQMD converted this significance level to pounds per day for ozone precursor emissions (10 tons per year × 2,000 pounds per ton ÷ 365 days per year = 55 pounds per day). The numeric indicators for other pollutants are also based on federal stationary source significance levels. If the thresholds are exceeded, air quality dispersion modeling may be used to determine if the emissions would cause an exceedance of applicable air quality standards.

- 550 pounds per day of CO
- 55 pounds per day of VOC

---

11 *South Coast Air Quality Management District, CEQA Air Quality Handbook (1993) 6-2.*

12 *South Coast Air Quality Management District, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project), 1993.*

13 *South Coast Air Quality Management District, CEQA Air Quality Handbook (1993) 6-2.*

14 *South Coast Air Quality Management District, CEQA Air Quality Handbook (1993) 6-1.*

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

Exceedance of SCAQMD mass emission thresholds does not explicitly mean an exceedance of applicable air quality standards is expected. Refined air quality dispersion modeling should be performed to predict impacts to ground level ambient pollutant levels.

(3) Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to the SCAQMD Governing Board's Environmental Justice Enhancement Initiative (I-4). The LST methodology was provisionally adopted by the SCAQMD Governing Board in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LSTs, which are voluntary, only apply to CO, NO_2, PM_{10}, and $PM_{2.5}$ emissions during construction and operation at the discretion of the lead agency. Screening-level analysis of LSTs is only recommended for construction activities at project sites that are 5 acres or less. The SCAQMD recommends that operational activities and construction for any project over 5 acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. Dispersion modeling would be required for CO_2, NO_X, PM_{10}, and $PM_{2.5}$ emissions during construction and for operational activities. NO_X to NO_2 conversion would be accounted for during the modeling to determine the maximum NO_2 concentrations at the nearest sensitive receptors.

The LST look-up thresholds for NO_X were developed based on the 1-hour NO_2 CAAQS of 0.18 ppm[15]. However, the USEPA has promulgated a 1-hour NO_2 NAAQS of 0.1 ppm based on a 98th percentile value, which is more stringent than the CAAQS. In addition to the more stringent federal 1-hr NO_2 standard, CARB has also established a new annual standard of 0.03 ppm. The LST look-up thresholds were developed for short-term standards (less than 24 hour concentration standards).

The SCAQMD has developed methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards. Impacts would be considered significant if the following would occur:

[15] *Final Localized Significance Threshold Methodology. South Coast Air Quality Management District, July 2008.*

- Maximum daily localized emissions are greater than the LSTs, resulting in predicted ambient concentrations in the vicinity of the project site greater than the most stringent ambient air quality standards for CO and NO_2.[16]
- Maximum localized PM_{10} or $PM_{2.5}$ emissions during construction are greater than the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the site to exceed 50 $\mu g/m^3$ over five hours (SCAQMD Rule 403 control requirement).

Based on criteria set forth in the SCAQMD CEQA Air Quality Handbook, the proposed project would have a significant impact with regard to operational emissions if any of the following would occur:

- Traffic generated by the project causes an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively, at an intersection or roadway within one-quarter mile of a sensitive receptor.
- The project would not be compatible with City of Fontana, SCAQMD and SCAG air quality policies.

Threshold 3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The Basin fails to meet national and state standards for O_3 (for both the 1-hour and 8-hour standard), PM_{10} (24 hour and annual) and $PM_{2.5}$, and therefore is considered a federal and state "non-attainment" area for these pollutants. The San Bernardino County portion of the Basin is additionally in non-attainment for NO_2. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Threshold 4: Would the project expose sensitive receptors to substantial pollutant concentrations?

The SCAQMD *CEQA Air Quality Handbook* states that the determination of the significance of TACs shall be made on a case-by-case basis, considering the following factors:

- The regulatory framework for the toxic material(s) and process(es) involved;
- The proximity of the TACs to sensitive receptors;
- The quantity, volume and toxicity of the contaminants expected to be emitted;
- The likelihood and potential level of exposure; and
- The degree to which the design of the proposed project will reduce the risk of exposure.

Impacts from TAC emissions may be assessed via a health risk assessment (HRA). The California Air Pollution Control Officers Association (CAPCOA) has provided general guidance for preparing HRAs.

[16] *South Coast Air Quality Management District, LST Methodology, http://www.aqmd.gov/ceqa/handbook/lst/Method_fina.pdf.*

CAPCOA's *Health Risk Assessments for Proposed Land Use Projects* describes significance levels that have been used by various air districts in California as enumerated below:[17]

- Thresholds can be based on a specific risk level such that a 10 per million excess cancer risk and an acute and chronic hazard index of one should not be exceeded. These thresholds tend to be consistent with the Hot Spot Program thresholds.
- Thresholds can also be based on the region's existing background cancer risk value if one exists.
  - One option is to establish a risk level equal to a region's background risk level.
  - Another option is to establish a risk level equal to twice a region's background risk level.
  - Still another option is to look at the ambient risk in the immediate vicinity of the project area rather than the regional risk level.
- Case by case thresholds may also be defined.

The SCAQMD *CEQA Handbook* recommends: (a) a lifetime probability of contracting cancer greater than 10 in one million (10×10^{-6}) as a significance threshold for evaluating cancer impacts from a facility, and (b) a health hazard index of 1.0 as a significance threshold for evaluating non-carcinogenic impacts from a facility.[18] These thresholds are normally applied to new facilities that emit TACs into the surrounding environment and potentially impact off-site sensitive receptors. In this case, the project involves locating a new sensitive receptor rather than a new source of TACs. According to SCAQMD Staff, projects that would locate sensitive receptors within 500 feet of a freeway should also utilize these thresholds when assessing impacts to the project site from motor vehicles traveling on the freeway. Based on these guidelines, the proposed project would have a significant impact from TACs, if:

- On-site stationary sources emit carcinogenic air contaminants or TACs that individually or cumulatively exceed the maximum individual cancer risk of ten in one million or an acute or chronic hazard index of 1.0.[19]
- Hazardous materials associated with on-site stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

In addition, the CARB has published a draft version of the *Air Quality and Land Use Handbook* on February 17, 2005, to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads

[17] *California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, (2009) 12.*

[18] *South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, (2011).*

[19] *SCAQMD Risk Assessment Procedures for Rules 1401 and 212, November 1998.*

with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene, and for operations with two or more machines provide 500 feet. Since the project introduces potentially sensitive populations to the area, these guidelines will be used in addition the SCAQMD criteria listed above.

Carcinogenic compounds are not considered to have threshold levels below which there are no health risks. Any exposure to carcinogenic compounds will have some associated health risk. The health risks can be defined in terms of the probability of developing cancer as a result of exposure to carcinogens at a given concentration. The Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA Guidance)[20] recommends the incorporation of several factors to quantify the carcinogenic compound dose via the inhalation pathway. The cancer risk values for diesel exhaust particulate matter, which is the primary MSAT of concern, consider exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for diesel exhaust are not known for these pathways.[21] All of the carcinogenic compounds in this assessment result in exposures to the public via the inhalation pathway.[22] Once determined, the dose is multiplied by the compound's inhalation cancer potency factor to derive the cancer risk estimate. The following equations were used to calculate the cancer risk due to inhalation using the modeled TAC concentrations:

$$\text{Risk} = \text{Dose inhalation} \times \text{Inhalation cancer potency factor} \quad \text{(Equation 1)}$$

Where:

$$\text{Dose inhalation} = C_{AIR} \times DBR \times A \times EF \times ED \times 10^{-6} / AT \quad \text{(Equation 2)}$$

Where:

C_{AIR} = concentration of compound in micrograms per cubic meter ($\mu g/m^3$)
DBR = breathing rate in liter per kilogram of body weight per day (L/kg/day)
A = inhalation absorption factor (1 for DPM and TACs)
EF = exposure frequency in days per year (day/year)
ED = exposure duration in years (year)
AT = averaging time period over which exposure is averaged in days (day)

Threshold 5: Would the project create objectionable odors affecting a substantial number of people?

[20] *Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, (2003).*

[21] *California Air Resources Board, Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Part A Exposure* Assessment*, Approved by the Scientific Review Panel, (1998).*

[22] *As noted above, diesel particulate matter is only evaluated via the inhalation pathway because factors associated with the other pathways are not known. The compounds associated with gasoline-fueled vehicles are all gases and do not result in exposures through other pathways.*

The SCAQMD *CEQA Air Quality Handbook* contains secondary thresholds consistent with Appendix G CEQA guidelines regarding odors. More specifically, the project would have a significant impact if it:

- Has the potential to create, or be subjected to, an objectionable odor that could impact a substantial number of sensitive receptors.

b. Project Design Features

The following sustainability features result in a reduction in air pollutant emissions and are proposed as part of the project.

SF-1: By providing jobs near housing, with retail, parks and schools within walking distance of compact residential villages, the Westgate Specific Plan residents will have less reliance on the automobile. This in turn will result in reduced vehicular emissions and an overall healthier community.

SF-2: The Westgate Specific Plan will become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the Westgate Specific Plan will achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CalGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills and install low pollutant-emitting materials. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet designed to ensure that all are working at their maximum capacity and according to their design efficiencies.

SF-3: In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape irrigation in public parks and rights of ways. The Inland Empire Utilities Agency (IEUA) is in the process of building a regional recycled water system to serve the Westgate Specific Plan and other areas in Fontana.

SF-4: The Westgate Specific Plan infrastructure plans require that a reclaimed water "purple pipe" system be installed in medians for all major streets, parkways and public parks. It will be connected to the IEUA recycled water system upon its completion.

c. Methodology

The evaluation of potential impacts to local and regional air quality that may result from the construction and long-term operations of the proposed project is conducted as follows:

(1) Construction Impacts

Construction of the proposed Westgate Specific Plan has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. In addition, fugitive dust emissions would result from grading, soil movement and construction activities.

Mass daily emissions during construction were calculated using the California Emissions Estimator Model (CalEEMod), which is an emissions estimation/evaluation model developed in conjunction with SCAQMD and other California Air Districts. CalEEMod was used to assist in quantifying emissions from construction activities for the proposed Westgate Specific Plan for a worst-case year. Construction emissions are associated with construction equipment, construction-related vehicle trips, and off-gas emissions from painting and paving. There are typically four major construction phases for development projects: demolition, site preparation, grading, and building construction. The building construction phase can be broken down into three sub-phases: building construction, architectural painting, and asphalt paving. As the majority of the proposed Westgate Specific Plan site is situated on undeveloped land, there would be minimal demolition activity. The output values used in this analysis were adjusted to be project-specific, based on usage rates of construction equipment, type of fuel, and construction schedule. For a complete listing of the construction equipment by phase and construction phase duration assumptions used in this analysis is included within the CalEEMod printout sheets that are provided in Appendix B.

Mobile source emissions, primarily NO_X, would result from the use of construction equipment such as bulldozers, wheeled loaders, and cranes. During the fourth phase, the application of architectural coatings (i.e., paints) and other building materials would release volatile organic compounds. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources. The equipment mix and construction duration for each stage is detailed in Appendix B.

The amount of construction equipment used and the duration of construction activity could have a substantial effect upon the amount of construction emissions, concentrations and the resulting impacts occurring at any one time. As such, the emission forecasts provided reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner.

The potential for localized effects from the on-site portion of daily emissions are evaluated at nearby sensitive receptor locations that could be impacted by the project based on the SCAQMD's LST methodology, which utilizes on-site mass emission rate look-up tables and project specific modeling, where appropriate. LSTs are only applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA) and distance to the nearest sensitive receptor. For PM_{10} and $PM_{2.5,}$ LSTs were derived based on requirements in SCAQMD Rule 403, Fugitive Dust. The mass rate look-up tables were developed for each SRA and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres. If the project exceeds five acres or any

applicable LST when the mass rate look-up tables are used as a screening analysis, then project specific air quality modeling model may be performed.

Construction analysis is based on data from the development of Phase I of the Westgate Specific Plan (see Chapter 2, *Project Description*, of this Draft EIR). Construction of Phase I future projects is expected to commence in 2015 and be completed in 2018. Details regarding the construction of subsequent phases would be highly speculative at this point in time, as the proposed Specific Plan does not propose development times or specific development projects. Instead, the proposed project provides for a comprehensive update of land uses, regulations, and development standards within site boundaries that will be developed as market forces, funding, etc., allow. It is not possible to accurately predict with any certainty the timing and the extent of buildout, if any, of the Westgate Specific Plan, after Phase 1. Therefore, it is not possible to accurately predict with any certainty the level of construction impacts after Phase 1. Impacts regarding construction for Specific Plan projects after Phase 1 will undergo their own CEQA analysis and be subject to the SCAQMD significance thresholds. Therefore, modeling of subsequent phases would be speculative and was not conducted in this analysis.

However, future construction related air quality impacts would be short term and temporary; lasting only as long as the construction phase of future projects. Some future projects could result in construction emissions over the SCAQMD significance thresholds. These projects would be mitigated to the extent possible to reduce emissions, although some project may still cause unavoidable significant impacts to air quality. Construction techniques in future years will be similar to those modeled for Phase 1. In addition, more stringent requirements for non-diesel engines being implemented would reduce the amount of emissions in the future over those that would be emitted today.

A complete listing of the construction equipment by phase, construction phase duration, and emissions estimation model assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix B of this Draft EIR.

(2) Operational Impacts

The CalEEMod software is used to forecast the daily regional emissions from mobile- and area-sources that would occur during long-term project operations. In calculating mobile-source emissions, the CalEEMod default trip length assumptions are applied to the average daily trip (ADT) estimates provided by the project's traffic consultant to arrive at vehicle miles traveled (VMT). Stationary-source emissions are compiled using procedures outlined in the Handbook.

Regional operational air quality impacts, for Phase I and full buildout, are assessed based on the incremental increase in emissions compared to baseline conditions. Recent CEQA developments and SCAQMD guidance have defined the baseline environmental setting to be established at the time that environmental assessment commences. For purposes of the operational emissions analysis, the baseline is assumed to be year 2012.

The potential for localized effects from the on-site portion of daily operation emissions were evaluated at sensitive receptor locations that could be impacted by the project based on the SCAQMD's LST methodology. LSTs are only applicable to the following pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. The SCAQMD provides LST mass rate look-up tables for projects that are less than or equal to five acres. If the project exceeds five acres

or any applicable LST when the mass rate look-up tables are used as a screening analysis, then project specific air quality modeling model may be performed.

Localized CO concentrations are evaluated based on prior dispersion modeling of the four busiest intersections in the Basin that has been conducted by the SCAQMD for its CO Attainment Demonstration Plan in the AQMP. The analysis compares the intersections with the greatest peak-hour traffic volumes that would be impacted by the project to the intersections modeled by the SCAQMD. Project-impacted intersections with peak-hour traffic volumes that are lower than the intersections modeled by the SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations compared to the SCAQMD modeled values in its AQMP.

Analysis of operational impacts is based on two scenarios: completion of Phase I construction in year 2018 and buildout of the Westgate Specific Plan in year 2035. Currently, Phase I is the only phase for which details on the development of specific planning areas are available. Full buildout was analyzed using what was proposed in the project description. Phase I operation emissions would utilize the most recently available technology available. Operational emissions from future phases would likely result in reduced emissions over Phase 1 because of new restrictive regulations being required in the future.

(3) Toxic Air Contaminants (TAC) Impacts (Construction and Operations)

Potential TAC impacts are evaluated by conducting a qualitative screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The screening-level analysis applies only to operations of projects and consists of identification of new or modified TAC emissions sources. If it is determined that a proposed project would introduce a potentially significant new source, or modify an existing TAC emissions source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed project impacts.

The CARB screening criteria does not provide methodologies to address construction impacts of TAC emissions, i.e. diesel particulate matter. In order to address such impacts, CARB and SCAQMD guidance for evaluating operations impacts on the potential health risks to nearby residents and students were applied to the project's construction activity with modification to address the short-term nature of the project's construction to such impacts. The assessment of diesel particulate emissions was conducted to assess this potential risk using the same assumptions that were used for the analysis of localized air quality emissions, as discussed above. Diesel exhaust particulate matter (DPM) is a TAC of particular concern during construction projects for its potential to cause adverse respiratory and cardiovascular health effects. DPM is emitted by heavy equipment and generators as well as by the trucks that transport large quantities of materials to and from construction sites. As such, this analysis includes all diesel exhaust emissions associated with on-site heavy duty construction equipment and estimates the risk at nearby sensitive receptors.

(4) High-Cube Warehouse Facility Health Risk Assessment

Based on existing information, a high-cube warehouse facility could be developed in Planning Area 41 as part of the Specific Plan. Some residential uses may be placed in proximity of the contemplated high-cube warehouse facility, which could emit TACs from diesel-fueled trucks, posing a potential health hazard to these sensitive land uses. At this stage in the planning process, it is speculative to assume placement of the

warehouse facility in Planning Area 41 in relation to sensitive land uses in other Planning Areas. Therefore, an HRA of on-site and off-site diesel emissions is performed quantitatively assuming that on-site diesel emissions would be distributed throughout Planning Area 41 and off-site diesel emissions would occur on likely roadways that trucks would travel within a one-quarter mile of Planning Area 41. The HRA was performed using detailed dispersion modeling (AERMOD/ISCST3), emission factors from the CARB EMFAC2011 on-road mobile source emissions inventory model, the CARB TRU emissions inventory database, and truck traffic data from the traffic report.[23]

(5) Freeway Health Risk Assessment

The CARB has published the "Air Quality and Land Use Handbook: A Community Health Perspective (April 2005)", which recommends against siting projects such as residential and school uses within 500 feet of a high traffic roadways or freeways. For projects with sensitive receptors located within 500 feet of a freeway, the AQMD recommends performing a detailed health risk assessment (HRA) to determine health risk impacts to on-site receptors. Since the project may place residential and school receptors within 500 feet of the I-15 and I-210 freeways, a detailed freeway HRA is performed for on-site receptors. This analysis also takes into account proposed changes to the City's air quality element which may allow residential uses closer to the freeway.

The HRA was performed using detailed dispersion modeling (AERMOD/ISCST3), emission factors from EMFAC2011 emissions inventory model, and traffic data (temporal and flow) for the I-15 and I-210 freeway obtained from the Caltrans Traffic Operations Department. Sources included as part of the health risk assessment include the I-15 and I-210 freeway segments located within one-quarter mile of the project site.

(6) Odor Impacts (Construction and Operations)

Potential odor impacts are evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) as necessary. The screening-level analysis consists of reviewing the proposed project's site plan and project description to identify new or modified odor sources. If it is determined that the proposed project will introduce a potentially significant new odor source, or modify an existing odor source, then downwind sensitive receptor locations are identified and site-specific dispersion modeling is conducted to determine proposed project impacts.

d. Analysis of Project Impacts

(1) Air Quality Plan Conflicts

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

Impact 4.C-1 *Implementation of the proposed project would conflict with or obstruct implementation of the applicable air quality plan (including, but not limited to, the AQMP, RTP, general plans, etc.) adopted for the purpose of avoiding or mitigating an environmental effect. This impact is considered significant and unavoidable with regard to the AQMP. The proposed project would result in less than significant impacts with respect to the CMP and Fontana General Plan.*

[23] *Kunzman Associates, Inc., Westgate Specific Plan Traffic Impact Analysis, (2013).*

(a) Air Quality Management Plan

The developments planned under the Westgate Specific Plan would serve to accommodate anticipated growth within the County of San Bernardino and, specifically, the City of Fontana. The proposed Specific Plan would help the City meet the following goals as outlined in the Air Quality element of the City's General Plan: a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants; a concerted effort to reduce energy consumption in the City that results in reduced emissions; and attainment of the minimum practicable particulate emissions released in the City from construction and operation of roads and buildings. Specifically, as discussed in Section 2, *Project Description*, the Westgate Specific Plan would provide jobs near housing, with retail, parks and schools within walking distance of compact and sustainable residential villages. All public parks, schools, and the regional trail would also be interconnected by on- and off-street bike lanes. These design features would enable decreased dependence on automobiles by residents. The proposed Westgate Specific Plan would also comply with the energy efficiency standards detailed in Title 24. All stationary air pollution sources would comply with SCAQMD rules and control measures. In addition, as discussed previously, the proposed Westgate Specific Plan includes a number of sustainability features that are intended to minimize the development's impacts on the environment. In particular, the Westgate Specific Plan would become one of the first large-scale planned communities in the Inland Empire to meet CalGreen standards. CalGreen requires that every new building constructed in California use low-pollutant emitting materials and conduct mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies. The proposed Westgate Specific Plan would also comply with CalGreen's mandatory 20 percent reduction in indoor water use, which would further decrease the amount of energy consumed in water conveyance.

Despite the measures to be implemented as part of the proposed Specific Plan, the proposed project contemplates substantially higher development intensity than was included in the adopted Westgate Specific Plan (and by association, the City's General Plan). Therefore, since the proposed project would exceed the growth projections for the project site contained in the City's General Plan, it would also not be consistent with the projections in the AQMP and RCP, since these plans partially serve as the basis for the AQMP. Furthermore, as discussed in greater detail below, the proposed project would result in short- and long-term unavoidable significant impacts resulting from project-related air pollutant emissions. As such, implementation of the Westgate Specific Plan would result in significant unavoidable impacts related to implementation of the SCAQMD AQMP.

(b) Congestion Management Program (CMP)

The Westgate Specific Plan may affect local transportation/circulation systems by increasing traffic to congested roadways and reducing vehicle speeds. The resulting increase in mobile source emissions could adversely affect regional air quality, especially ozone levels and localized carbon monoxide concentrations. Under the regional Congestion Management Program (CMP), overseen by the San Bernardino County Association of Governments (SANBAG), if the project would cause traffic service at an CMP intersection to deteriorate below LOS E or the level established in the CMP, the resulting congestion should be addressed by improvements, programs, or actions that either mitigate the deficiency or measurably improve the LOS of the system.

The following questions should be asked regarding the potential of a development project to adversely affect air quality:

- Does the site design for public right-of-way and pedestrian walkways encourage pedestrian traffic? If not, can the site be modified to encourage pedestrian traffic?
- Is on-site traffic circulation designed to reduce vehicle queuing? If not, can the project layout be modified to minimize vehicle idling emissions?

As stated above, the Westgate Specific Plan would provide jobs near housing, with retail, parks and schools within walking distance of compact residential villages. The residents would have less reliance on automobiles, which would result in reduced vehicular emissions and an overall healthier community, consistent with the CMP. On-site traffic circulation will also be designed to reduce vehicle queuing, thus reducing emissions. As discussed in the Westgate Specific Plan Traffic Impact Analysis by Kunzman Associates, Inc.,[24] intersections with roadway improvements would operate at acceptable LOS under existing plus Phase I as well as existing plus buildout conditions. Based on the discussion above, implementation of the proposed project would result in a less than significant impact related to implementation of the CMP.

(c) Fontana General Plan

An evaluation of the proposed project's consistency with the applicable goals and policies of the Fontana General Plan Air Quality Element is presented below in **Table 4.C-4**, *General Plan Consistency Analysis*. As summarized in Table 4.C-4, the project would not result in conflicts with the applicable policies contained in the Fontana General Plan Air Quality Element, and therefore impacts in this regard would be considered less than significant.

(2) Violation of Air Quality Standards

Threshold	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact 4.C-2 *Implementation of the proposed project would potentially violate air quality standards or contribute substantially to an existing or projected air quality violation. Maximum regional construction emissions resulting from construction of Phase I of the Westgate Specific Plan would exceed the SCAQMD daily significance thresholds for PM_{10}, NO_X and VOC resulting in potentially significant short-term impacts. Operational regional emissions resulting from operation of the proposed Westgate Specific Plan exceed the SCAQMD daily significance thresholds for VOC, NO_X, CO, and PM_{10} at completion of Phase I. Emissions resulting from operation of the Westgate Specific Plan at buildout would also exceed the SCAQMD thresholds for VOC, NO_X, CO, PM_{10} and $PM_{2.5}$. Therefore, impacts related to regional emissions from operation of the proposed project would be significant.*

[24] *Kunzman Associates, Inc., Westgate Specific Plan Traffic Impact Analysis, (2013).*

Table 4.C-4

General Plan Consistency Analysis

Policy	Consistency
Air Quality Element	
Goal #1: Air quality improvements are achieved in our City while continued economic growth has been sustained.	
Policy 1-1: Support the Air Quality Management District in implementing cost effective measures that enhance surrounding jurisdictions ability to meet or exceed adopted air quality standards.	**Consistent.** The proposed project would be required to implement CalGreen building standards in future construction projects, and would also employ a number of other sustainability features, all of which would serve to reduce air emissions and help achieve air quality goals.
Policy 1-2: Preferential treatment or permit streamlining shall be provided for those industrial/commercial projects that go beyond BACT or emissions reduction measures that go beyond those required by the SCAQMD for permitting.	**Not Applicable.** This policy relates to the City's efforts to incentivize emissions reduction measures for businesses within the jurisdiction.
Policy 1-3: Preferential treatment or permit streamlining shall be provided for those residential projects that incorporate emissions reduction measures that go beyond those suggested by the SCAQMD for residential development.	**Not Applicable.** This policy relates to the City's efforts to incentivize emissions reduction measures for residential development within the jurisdiction.
Policy 1-4: Educate the public on the economic benefits of reduced air pollution.	**Not Applicable.** This policy relates to the City's efforts to educate the public regarding air pollution reduction.
Goal #2: Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.	
Policy 2-1: The City shall seek to integrate land use and transportation planning to the maximum extent practical.	**Not Applicable.** This policy relates to the City's efforts to foster integration of land use and transportation planning.
Policy 2-2: Mixed-use development should be planned for and incentivized to develop in our City.	**Not Applicable.** This policy relates to the City's efforts to incentivize and plan for mixed-use development.
Policy 2-3: Employers locating in our City should be encouraged to develop trip reduction plans to promote alternative work schedules, ridesharing, telecommuting, and work-at-home programs, employee education and preferential parking.	**Consistent.** To the extent feasible, future businesses within the Specific Plan area would be encouraged and educated regarding the use of alternative work schedules, ridesharing, telecommuting, and work-at-home programs, employee education, and preferential parking.
Policy 2-4: Incentives, regulations, and Transportation Demand Management systems shall be developed in cooperation with surrounding jurisdictions to eliminate vehicle trips that would otherwise be made.	**Not Applicable.** This policy relates to the City's efforts to work with surrounding jurisdictions to promote vehicle trip reduction.
Policy 2-5: Merchants in our City should be assisted in getting their customers to shift from single occupancy vehicles to transit, carpools, bicycles, or foot.	**Consistent.** The proposed project includes an extensive network of pedestrian and bicycle-friendly facilities that would serve to foster non-vehicular mobility throughout the Specific Plan area.

Table 4.C-4 (Continued)

General Plan Consistency Analysis

Policy	Consistency
Policy 2-6: Developers in our community shall work to reduce vehicle trips and total vehicle miles traveled in projects that are approved here.	**Consistent.** The proposed Specific Plan has been designed to locate complementary uses in proximity to one another, which would serve to reduce vehicle trips within the project boundaries; furthermore, the proposed project includes an extensive network of pedestrian and bicycle-friendly facilities that would serve to foster non-vehicular transportation throughout the Specific Plan area.
Policy 2-7: The City should manage parking supply to discourage auto use, while ensuring that economic development goals will not be sacrificed.	**Not Applicable.** This policy relates to the City's efforts to manage parking supply as a tool to reduce vehicle use while maintaining the local economy.
Policy 2-8: Efforts to expand bus, rail, and other forms of transit in the portion of the South Coast Air Basin within San Bernardino County shall be cooperatively pursued with Omnitrans, MTA and other transit providers.	**Consistent.** Future development on-site would be coordinated with Omnitrans and other transit agencies to allow for the expansion of transit services to respond to increasing demand as the project site is developed over the long-term.
Policy 2-9: The City should invest in clean fuel systems on new local government fleet vehicles as their service life ends, and promote similar actions by other units of government.	**Not Applicable.** This policy relates to the City's efforts to invest in clean fuel systems.
Policy 2-10: The City shall manage traffic flow through signal synchronization, while coordinating with and permitting the free flow of mass transit vehicles, as a way to achieve enhanced mobility.	**Not Applicable.** This policy relates to the City's efforts to utilize signal synchronization as a tool to manage traffic flow.
Policy 2-11: Traffic signals should be synchronized throughout the City and with those of adjoining cities and the California Department of Transportation.	**Not Applicable.** This policy relates to the City's efforts to coordinate traffic signal synchronization with other jurisdictions.
Policy 2-12: Traffic signals shall be constructed and improved with channelization and Automated Traffic Surveillance and Control systems at appropriate intersections.	**Consistent.** Future traffic system improvements required to mitigate project-related traffic effects would be constructed and improve with channelization and Automated Traffic Surveillance and Control systems, where appropriate.
Policy 2-13: Traffic hazards, delays, and idle time should be diminished through highway and roadway maintenance, rapid emergency response, debris removal, and elimination of at-grade railroad crossings.	**Not Applicable.** This policy relates to the City's efforts to minimize traffic hazards, delays, and idle time through highway and roadway maintenance, rapid emergency response, debris removal, and elimination of at-grade railroad crossings.
Policy 2-14: Heavy trucks shall be discouraged from excessive idling both at the roadside and during unloading/loading operations.	**Not Applicable.** This policy relates to the City's efforts to reduce truck idling.

Table 4.C-4 (Continued)

General Plan Consistency Analysis

Policy	Consistency
Policy 2-15: The City should provide incentives for business owners to schedule deliveries at off-peak traffic periods.	**Not Applicable.** This policy relates to the City's efforts to incentivize scheduling truck deliveries during off-peak traffic periods.
Goal #3: A concerted effort to reduce energy consumption in our City results in reduced emissions.	
Policy 3-1: Source reduction, recycling, and other appropriate measures to reduce the dependence on and processing of new raw materials shall be promoted.	**Consistent.** The proposed project would implement recycling programs per City of Fontana and state requirements.
Policy 3-2: Energy conservation shall be achieved through a combination of incentives and regulations for private and public developments.	**Consistent.** The proposed project would implement CalGreen building standards in all future construction, which would reduce water and energy consumption, as well as reduce waste generation.
Policy 3-3: The City shall promote and provide incentives for the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.	**Consistent.** The proposed project would implement CalGreen building standards in all future construction, which would reduce water and energy consumption, as well as reduce waste generation.
Policy 3-4: The City shall promote and provide incentives for the use of energy efficient building materials/methods that reduce emissions.	**Consistent.** The proposed project would implement CalGreen building standards in all future construction, which would reduce water and energy consumption, as well as reduce waste generation.
Policy 3-5: The City shall promote and provide incentives for the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.	**Consistent.** In addition to meeting the requirements of CalGreen building standards, future development projects would, to the extent required by City or state regulations, utilize energy-efficient fixtures, appliances, and equipment.
Policy 3-6: Centrally heated facilities to utilize automated time clocks or occupant sensors to control heating shall be required in facilities of a size and character to yield a positive return on investment.	**Consistent.** To the extent deemed necessary by the City, future development that includes central heating would utilize automated time clocks or occupant sensors to minimize energy inefficiency.
Policy 3-7: The City shall require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code and shall promote and provide incentives for residential building construction that goes beyond the guidelines detailed in Title 24.	**Consistent.** Future residential construction within the project site would comply with or exceed the energy use guidelines detailed in Title 24 of the California Administrative Code.

Table 4.C-4 (Continued)

General Plan Consistency Analysis

Policy	Consistency
Policy 3-8: Stationary pollution sources shall be managed to prevent the release of toxic pollutants through: • Design features; • Operating procedures; • Preventive maintenance; • Operator training; and • Emergency response planning.	**Consistent.** Proposed uses on-site that could generate toxic air contaminants would implement measures to minimize releases of such materials into the environment, as required by the SCAQMD.
Policy 3-9: Stationary air pollution sources shall comply with applicable air district rules and control measures.	**Consistent.** Proposed uses on-site that create pollution sources would comply with all applicable SCAQMD rules and control measures.
Policy 3-10: Any project that exceeds allowable emissions, as established by the SCAQMD, shall mitigate its anticipated emissions to the extent reasonably feasible.	**Consistent.** The proposed project has recommended all feasible mitigation measures (as required by CEQA) to minimize air quality impacts to the extent possible. With implementation of these mitigation measures, the Specific Plan will be consistent with the General Plan.
Policy 3-11: Alternative energy sources development shall be promoted in Fontana.	**Not Applicable.** This policy relates to the City's efforts to promote the development of alternative energy sources within the jurisdiction.
Goal #4: The minimum practicable particulate emissions are released in our City from construction and operation of roads and buildings.	
Policy 4-1: Particulate emissions from roads, parking lots, construction sites and agricultural lands shall be kept at the minimum feasible level.	**Consistent.** Future development projects would implement all feasible mitigation measures (as required by CEQA) and comply with applicable SCAQMD rules and regulations to the extent possible in order to minimize particulate emissions impacts. With implementation of these mitigation measures, the Specific Plan will be consistent with the General Plan.
Policy 4-2: Emissions from building materials and construction methods that generate excessive pollutants shall be kept at the minimum feasible level.	**Consistent.** Future development projects would implement all feasible mitigation measures (as required by CEQA) and comply with applicable SCAQMD rules and regulations to the extent possible in order to minimize construction-related emissions impacts. With implementation of these mitigation measures, the Specific Plan will be consistent with the General Plan.

Source: PCR Services Corporation, 2014

(a) Construction

Construction of the proposed Westgate Specific Plan has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. In addition, fugitive dust emissions would result from excavation and debris removal. Mobile source emissions, primarily NO_X, would result from the use of construction equipment such as dozers, loaders, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release volatile organic compounds. Construction emissions can vary substantially from day-to-day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources and project design features.

The estimates of construction emissions below are directly related to the duration and intensity of various construction activities, and the daily emissions, which are the basis for the analysis below, vary according to the activities being performed on any one day. The emissions levels in **Table 4.C-5**, *Unmitigated Proposed Westgate Specific Plan - Estimate of Phase I Construction Emissions*, represent the highest daily emissions projected to occur on any one day. As presented in Table 4.C-5, construction-related daily maximum regional emissions would not exceed the SCAQMD daily significance thresholds for CO, $PM_{2.5}$, or SO_X. However, maximum regional emissions would exceed the SCAQMD daily significance thresholds for PM_{10}, NO_X and VOC during periods of heavy use of heavy-duty construction equipment. Therefore, regional construction emissions resulting from Phase I of the Westgate Specific Plan would result in potentially significant short-term impacts and would require mitigation.

Table 4.C-5

Unmitigated Proposed Westgate Specific Plan -
Estimate of Phase I Construction Emissions [a]
(pounds per day)

Regional Emissions	**VOC**	**NOx**	**CO**	**SOx**	**PM_{10} [b]**	**$PM_{2.5}$ [b]**
Individual Phases						
Site Preparation	7	71	55	1	28	17
Grading	27	250	201	<1	49	28
Construction	17	110	135	<1	17	8
Paving	14	100	61	<1	7	6
Architectural Coating	246	10	19	<1	3	1
Maximum Regional Emissions	**277**	**250**	**215**	**1**	**49**	**28**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Over (Under)	202	150	(335)	(149)	(101)	(27)
Exceed Threshold?	**Yes**	**Yes**	**No**	**No**	**Yes**	**No**

[a] *Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the URBEMIS model printout sheets and/or calculation worksheets that are presented in Appendix B.*

[b] *PM_{10} and $PM_{2.5}$ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.*

Source: PCR Services Corporation, 2014

These emission forecasts reflect a specific set of conservative assumptions in which Phase I would be built out over 60 months. Because of this conservative assumption, actual emissions could be less than those forecasted. For example, if construction is delayed or occurs over a longer time period, maximum daily emissions could be reduced because of, for example, (1) the availability of a more modern, cleaner burning, construction equipment fleet mix, or (2) a less intensive buildout schedule (lower daily emissions occurring over a longer time interval).

Development of Phase I would likely produce higher construction emissions than future phases as it would undergo construction using more current construction equipment, with generally higher emissions factors. Emissions resulting from the construction of future phases to project buildout are expected to be lower than those from Phase I due to newer regulations that require less polluting equipment; however, future construction emissions could still exceed regional mass emission thresholds for VOC, NO_X, and PM_{10}. Future projects would undergo their own CEQA analysis.

Since construction of the proposed Westgate Specific Plan would potentially exceed the regional significance thresholds for VOCs, NO_X, and PM_{10}, the project could contribute to temporary NO_2- and PM_{10}-related health impacts. Because VOCs and NO_X are ozone precursor emissions, the project could contribute to temporary impacts related to regional ozone formation and related ozone health impacts. As described above in subsection 2.b., potential health effects could result from exposure to pollutant concentrations in excess of applicable ambient air quality standards for ozone, NO_2, and PM_{10} including but, not limited to, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, airway contraction, respiratory infections, and number and severity of asthma attacks. However, due to the dispersive effects of meteorology (wind, temperature, humidity, etc.) and the geographic distribution of the emissions, an exceedance of a mass emissions numeric indicator from project-related activities does not necessarily result in exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

For the project, the level of exceedance of the VOC, NO_X, and PM_{10} thresholds, as shown in Table 4.C-5, would occur if construction of all land uses in Phase I were to happen in the 60 months conservatively assumed in the emissions analysis. If construction is delayed or occurs over a longer time period, maximum daily emissions would be reduced due to several factors, which include (1) the availability of a more modern, cleaner burning, construction equipment fleet mix, or (2) a less intensive buildout schedule (lower daily emissions occurring over a longer time interval). Project construction emissions of VOCs, NO_X, and PM_{10} would be regional in nature as they would occur over a relatively large area from multiple individual developments associated with the Westgate Specific Plan. In addition, ground-level ozone formation occurs through a complex photo-chemical reaction between NO_X and VOCs in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis instead of a localized basis. According to CARB, anthropogenic (i.e., man-made) sources of emissions in the Basin emit a total of approximately 467 tons of VOCs, 512 tons of NO_X, and 154 tons of PM_{10} per day. Table 4.C-5 indicates that maximum construction emissions from the project could be up to 0.07 tons (143 pounds) of VOCs, 0.21 tons (426 pounds) of NO_X, and 0.11 tons (217 pounds) of PM_{10} per day.[25] This represents approximately 0.02 percent of the Basin's VOC emissions, 0.04 percent of the Basin's NO_X emissions, and 0.07 percent of the Basin's PM_{10} emissions. Given that the project's emissions would constitute a very small portion of the

[25] *California Air Resources Board, South Coast Air Basin – Emission Inventory Data – 2012 Estimated Basin Data, http://www.arb.ca.gov/ei/maps/basins/abscmap.htm. Accessed October 2014.*

Basin's emissions and would occur over a relatively large area and given that meteorological effects, such as wind, would disperse the pollutants, it is unlikely that the temporary exceedance of the VOC, NO_X, and PM_{10} mass emissions thresholds from construction would result in a measurable increase in the respective pollutant concentrations in proximity to the Westgate Specific Plan area or elsewhere in the Basin to a degree that measureable heath impacts would result.

(b) Operation

Currently, land use in the project area is of low intensity or vacant and most parcels have no development. Thus, the analysis in this Draft EIR assumes that all operational emissions from the proposed project are net new emissions. In actuality, future employees, residents, and visitors to the Westgate Specific Plan area may already work and shop within the Basin, so their emissions are already being counted. Thus the analysis of counting all operational emissions as net new is conservative in nature and represents a worst-case scenario. Operational emissions would likely be less than what is projected.

Regional air pollutant emissions associated with proposed project operations would be generated by the consumption of electricity and natural gas, and by the operation of on-road vehicles. Pollutant emissions associated with energy demand (i.e., electricity generation and natural gas consumption) are classified by the SCAQMD as regional stationary source emissions. Criteria pollutant emissions associated with the production and consumption of energy were calculated using the CalEEMod emissions inventory model.

Mobile-source emissions were calculated using CalEEMod with trip generation data from the Westgate Specific Plan Traffic Impact Analysis by Kunzman Associates, Inc.[26] As shown in **Table 4.C-6**, *Unmitigated Westgate Specific Plan Operational Emissions – Phase I and Buildout*, regional emissions resulting from operation of the proposed Westgate Specific Plan would be above applicable thresholds for VOC, NOx, CO, and PM_{10} at completion of Phase I. Emissions resulting from operation of the Westgate Specific Plan at buildout would also exceed SCAQMD thresholds for VOC, NOx, CO, PM_{10} and $PM_{2.5}$.Because the Westgate Specific Plan site is currently undeveloped, this analysis took the conservative approach of counting all emissions as net new. This result was thus expected. In reality, many future employees and visitors to the amenities provided by the Westgate Specific Plan likely already travel within the Basin and generate mobile-source emissions there. For example, a new retail development implemented pursuant to the Westgate Specific Plan could redistribute existing vehicle trips from a similar existing retail development. In such cases, regional mobile source emissions could be unchanged or even reduced if the new retail development is located closer to customers compared to the existing retail development. It is unknown at this time to what extent new developments implemented pursuant to the Westgate Specific Plan would result in net new emissions or would relocate or redistribute existing sources of emissions. As such, the emissions shown in Table 4.C-6 are based on the highly conservative assumption that operation of the land uses proposed under the Westgate Specific Plan would result in all net new emissions. It is likely that the actual incremental increase in regional emissions from operation of the land uses proposed under the Westgate Specific Plan could be substantially lower. Nevertheless, impacts related to regional emissions from operation of the Westgate Specific Plan would be potentially significant, requiring mitigation.

[26] *Kunzman Associates, Inc., Westgate Specific Plan Traffic Impact Analysis, (2013); Kunzman Associates, Inc., Westgate Specific Plan Trip Generation Comparison Analysis, (2014).*

Table 4.C-6

Unmitigated Westgate Specific Plan
Operational Emissions – Phase I and Buildout[a]
(Pounds per Day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase I – Year 2018						
Mobile	79	239	883	3	150	42
Energy	1	9	4	<1	1	1
Area Sources	140	2	149	<1	3	3
Total Net	**220**	**250**	**1036**	**3**	**154**	**46**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	165	195	486	(147)	4	(9)
Exceed Threshold?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**No**
Buildout – Year 2035						
Mobile	194	491	2,315	10	655	184
Energy	4	34	17	<1	3	3
Area Sources	378	6	529	<1	12	11
Total Net	**576**	**531**	**2,861**	**10**	**670**	**198**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	521	413	2,311	(140)	520	143
Exceed Threshold?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

[a] *Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix B.*

Source: PCR Services Corporation, 2014

Since operation of the proposed Westgate Specific Plan would potentially exceed the regional significance thresholds for VOCs, NO_X, CO, PM_{10}, and $PM_{2.5}$, the Project could contribute to health impacts related to these pollutants. Because VOCs and NO_X are ozone precursor emissions, the Project could contribute to temporary impacts related to regional ozone formation and related ozone health impacts. As described above in subsection 2.b., potential health effects could result from exposure to pollutant concentrations in excess of applicable ambient air quality standards for ozone, NO_2, CO, PM_{10}, and $PM_{2.5}$ including but, not limited to, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, airway contraction, interference with oxygen transport in the body, respiratory infections, and number and severity of asthma attacks. However, due to the dispersive effects of meteorology (wind, temperature, humidity, etc.) and the geographic distribution of the emissions, an exceedance of a mass emissions numeric indicator from project-related activities does not necessarily result in exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

Project operational emissions would be regional in nature as they would occur over a relatively large area from multiple individual developments associated with the Westgate Specific Plan. As shown in Table 4.C-6, the majority of the emissions are from mobile sources; therefore, the majority of the emissions would occur

from vehicles traveling over regional roadways. In addition, ground-level ozone formation occurs through a complex photo-chemical reaction between NO_X and VOCs in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis instead of a localized basis. According to CARB, anthropogenic sources of emissions in the Basin emit a total of approximately 467 tons of VOCs, 512 tons of NO_X, 2,272 tons of CO, 154 tons of PM_{10}, and 68 tons of $PM_{2.5}$ per day. Table 4.C-5 indicates that maximum operational emissions from the project could be up to 0.24 tons (528 pounds) of VOCs, 1.09 tons (2,425 pounds) of CO, 0.19 tons (413 pounds) of NO_X, 0.26 tons (568 pounds) of PM_{10}, and 0.08 tons (168 pounds) of $PM_{2.5}$ per day. This represents approximately 0.05 percent of the Basin's VOC emissions, 0.05 percent of the Basin's CO emissions, 0.04 percent of the Basin's NO_X emissions, 0.16 percent of the Basin's PM_{10} emissions, and 0.11 percent of the Basin's $PM_{2.5}$ emissions. As noted above, this assumes that all project emissions are considered net new emissions, which is highly conservative assumption that likely overestimates the project's actual incremental increase in regional emissions. Given that the project's emissions would constitute a very small portion of the Basin's emissions and would occur over a relatively large area (primarily due to motor vehicles traveling on regional roadways) and given that meteorological effects, such as wind, would disperse the pollutants, it is unlikely that the exceedance of the VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ thresholds from operation would result in a measurable increase in the respective pollutant concentrations in proximity to the Westgate Specific Plan area or elsewhere in the Basin to a degree that measureable heath impacts would result.

(3) Cumulative Pollutant Increases

Threshold	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Impact 4.C-3 *Implementation of the proposed project would result in a cumulatively considerable net increase of criteria pollutants for which the region is non-attainment under applicable federal or state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors). As the project would have maximum daily construction emissions that exceed the thresholds for VOC and NO_X, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone and NO_2 and would therefore result in potentially significant impacts. As the project would have maximum daily operational emissions that exceed the thresholds for VOC, NO_X, PM_{10}, and $PM_{2.5}$, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone, NO_2, PM_{10}, and $PM_{2.5}$ and would therefore result in potentially significant impacts.*

The proposed Westgate Specific Plan would result in the emission of criteria pollutants for which the region is in non-attainment during both construction and operation. The San Bernardino County portion of the Basin is designated non-attainment for ozone, NO_2 (state standard only), PM_{10}, and $PM_{2.5}$.

(a) Construction

As stated above, worst-case emissions of VOC and NO_X from the construction of the Westgate Specific Plan would exceed applicable mass emission thresholds. VOC and NO_X are precursors to ozone. It is not possible to determine regional ozone impacts from a project's ozone precursor emissions. Nonetheless, as the project

would have maximum daily emissions that exceed the thresholds for VOC and NO_X, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone and NO_2 and would therefore result in potentially significant impacts.

(b) Operation

As discussed above, operation of Phase I implementation projects (residential units, commercial and retail amenities, etc.) of the proposed Westgate Specific Plan would cause emissions of VOC, NO_X, and PM_{10} that would exceed SCAQMD regional mass emission thresholds. Operation of future projects at buildout of the proposed Westgate Specific Plan would cause exceedances of VOC, NO_X, PM_{10} and $PM_{2.5}$ above applicable mass emission thresholds. It is not possible to determine regional ozone impacts from a project's ozone precursor emissions. Nonetheless, as the project would have maximum daily emissions that exceed the thresholds for VOC, NO_X, PM_{10}, and $PM_{2.5}$, implementation of the proposed Westgate Specific Plan would contribute incrementally to regional ozone, NO_2, PM_{10}, and $PM_{2.5}$ and would therefore result in potentially significant impacts.

(4) Exposure to Substantial Pollutant Concentrations

Threshold	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact 4.C-4 *Implementation of the proposed project would potentially expose sensitive receptors to substantial pollutant concentrations. On-site construction emissions from future development pursuant to the proposed Specific Plan could potentially cause or contribute to locally significant air quality impacts as they would potentially exceed the SCAQMD localized thresholds for VOC, NO_X and PM_{10}. Thus, localized construction impacts of Phase I future projects could potentially exceed the LSTs. On-site operational sources of emissions would be relatively minimal and would be required to comply with SCAQMD rules and permitting requirements as applicable. On-site operational emissions are not expected to exceed the SCAQMD localized thresholds for VOC, NO_X, PM_{10}, and $PM_{2.5}$. Thus, localized operational impacts associated with project implementation would not exceed the LSTs and impacts would be less than significant. The proposed Westgate Specific Plan would not contribute to the formation of CO hotspots and would result in less than significant impacts with respect to CO hotspots. Construction activities would not expose nearby sensitive receptors to substantial or long-term TAC emissions. Therefore, construction would result in a less than significant impact. Operation would not expose off-site sensitive receptors to substantial sources of TAC emissions. Therefore, operation would result in a less than significant impact to off-site receptors. Operation would potentially locate on-site sensitive receptors in close proximity to freeways (I-15 and I-210), which may expose on-site sensitive receptors to substantial sources of motor vehicle TAC emissions. Therefore, operation would result in a potentially significant impact to on-site receptors.*

(a) Construction

As previously discussed, the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project site as a result of construction and operational activities. The thresholds are based on standards established by the SCAQMD in the LST Methodology. The LSTs are compared to construction emissions that occur on the project site. However, the LSTs are applicable to

projects at the project-specific level and are not applicable to regional projects.[27] In addition, the LSTs do not apply to emissions occurring off the project site, such as emissions from motor vehicles.[28]

As discussed in Section 2, *Project Description*, development of Phase I is spread out throughout the Westgate Specific Plan boundaries. Planning areas that would be developed during Phase I range in size from 0.3 to 28.7 acres. As previously discussed, the SCAQMD has developed screening tables for projects that are five acres or less. Therefore, an LST analysis of planning areas five acres or less that entail substantial construction activity (Planning Areas 12, 13, and 34) was conducted using the SCAQMD screening tables. Among these planning areas, the closest sensitive receptors are residential uses adjacent to Planning Area 13. As shown in **Table 4.C-7**, *Phase I Development – Localized Impacts of Planning Areas Less Than 5 Acres*, the analysis shows that the independent construction of each of these future projects that are five acres or less would not exceed the SCAQMD LST thresholds Thus, localized construction-period impacts of planning areas five acres or less would be less than significant.

However, because the LST lookup tables are only applicable to projects less than 5 acres and could not account for impacts from simultaneous construction at nearby planning areas, this analysis addresses the potential for construction to cause or contribute to localized air quality impacts in a more regional and qualitative manner. As shown in Table 4.C-5, construction emission for Phase I would potentially exceed the regional thresholds for VOC, NOx, and PM_{10}. These emissions are primarily generated from heavy-duty construction equipment and earthmoving activities. Thus, construction emissions have the potential to cause or contribute to regionally significant air quality impacts in the Basin. This suggests that on-site construction emissions from future development pursuant to the proposed Specific Plan could potentially cause or contribute to locally significant air quality impacts. However, it should be noted that roughly 21, 25, and 85 percent of regional VOC, NO_X, and PM_{10} emissions from the worst-day case of Phase I construction are on-road mobile-source emissions associated with hauling and worker commutes. Nevertheless, localized construction impacts of Phase I future projects could potentially exceed the LSTs, particularly for construction of planning areas larger than five acres or planning areas with more intense construction activity than assumed in this analysis.

As with regional construction impacts, the analysis of Phase I construction emissions would most likely represent higher emissions than future phases due to a more energy efficient and cleaner burning construction equipment fleet mix. The analysis above shows that localized construction-period impacts are less than significant for planning areas entailing significant construction activity that span five acres of less. In addition, as mentioned above, a significant portion of VOC, NO_X, and PM_{10} emissions results from mobile-

source emissions. Nonetheless, construction LST impacts for planning areas greater than five acres are considered potentially significant and prior to future project approval, applicants for these future projects shall be required to conduct an LST analysis in accordance with the SCAQMD LST Methodology.

[27] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *(2008) 1-1.*

[28] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *(2008) 1-4.*

Table 4.C-7

Phase I Development – Localized Impacts of Planning Areas Less Than 5 Acres[a]

Planning Area 12

	VOC	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
Site Preparation	4	43	36	<1	9	6
Grading	3	28	23	<1	4	3
Construction	2	23	21	<1	2	1
Paving	1	12	13	<1	1	1
Architectural Coating	44	2	2	<1	<1	<1
Maximum Localized Emissions	**47**	**43**	**36**	**<1**	**9**	**6**
SCAQMD Localized Significance Threshold[c]	**-**	**276**	**2,525**	**-**	**33**	**10**
Over (Under)	-	(233)	(2,489)	-	(24)	(4)
Exceed Threshold?	**-**	**No**	**No**	**-**	**No**	**No**

Planning Area 13

	VOC	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
Site Preparation	2	22	15	<1	2	1
Grading	2	23	18	<1	4	1
Construction	3	3	17	<1	1	1
Paving	1	12	12	<1	1	1
Architectural Coating	33	33	2	<1	<1	<1
Maximum Localized Emissions	**37**	**48**	**31**	**<1**	**4**	**3**
SCAQMD Localized Significance Threshold[c]	**-**	**177**	**1,296**	**-**	**7**	**5**
Over (Under)	-	(129)	(1,265)	-	(3)	(2)
Exceed Threshold?	**-**	**No**	**No**	**-**	**No**	**No**

Planning Area 34

	VOC	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
Site Preparation	4	43	36	<1	9	6
Grading	3	28	23	<1	4	3
Construction	3	22	21	<1	2	1
Paving	1	12	12	<1	1	1
Architectural Coating	45	2	2	<1	<1	<1
Maximum Localized Emissions	**49**	**43**	**36**	**<1**	**9**	**6**
SCAQMD Localized Significance Threshold[c]	**-**	**778**	**29,410**	**-**	**322**	**170**
Over (Under)	-	(735)	(29,374)	-	(313)	(164)
Exceed Threshold?	**-**	**No**	**No**	**-**	**No**	**No**

[a] *Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix B.*

[b] *PM_{10} and $PM_{2.5}$ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.*

[c] *The SCAQMD LSTs are based on Source Receptor Area 33 (Central San Bernardino County) for: a 4.6-acre site within a 40-meter receptor distance (Planning Area 12); a 2.2-acre site within a 25-meter receptor distance (Planning Area 13); and a 3.4-acre site within a 465-meter receptor distance (Planning Area 34). However, the actual construction area at any given time is likely to be smaller.*

Source: PCR Services Corporation, 2014

(b) Operation

As with localized construction impacts, development of future projects at the completion of Phase I, as well as full buildout, would occur throughout the Westgate Specific Plan area. Planning areas for all phases range in size from 0.3 to up to 60 acres for the proposed high school in Westgate Village East. Many of the planning areas to be scheduled for Phase I development are clustered (for example, those in the Falcon Ridge Village) and thus represent a worst-case scenario for localized operational impacts. As shown in Table 4.C-6, operational emission from energy and area sources would be relatively minimal compared to mobile source emissions. During Phase I operation, mobile-source emissions of VOC, NO_X, CO, and PM_{10} represent, respectively, 36, 96, 85, and 97 percent of the total emissions from a worst-day case. At buildout, mobile emissions of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ represent, respectively, 31, 93, 81, 98, and 93 percent of the total emissions.

As shown above, mobile sources are the largest source of local emissions and CO is the pollutant of greatest concern. As shown in Table 4.C-3, CO levels in the project area are substantially below the federal and state standards. Carbon monoxide decreased dramatically in the Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Basin for some time and the Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS.

Table 4.C-2 indicates that the maximum CO levels in recent years are 3 ppm (1-hour average) and 1.9 ppm (8-hour average) compared to the thresholds of 20 ppm (1-hour average) and 9.0 (8-hour average). Thus, it is not expected that CO levels at project-impacted intersections would rise to such a degree as to cause an exceedance of these standards.

Localized areas where ambient concentrations exceed state and/or federal standards are termed CO hotspots. Emissions of CO are produced in greatest quantities from motor vehicle combustion and are usually concentrated at or near ground level because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Therefore, the SCAQMD conducted CO modeling for the 2003 AQMP for four intersections considered the worst-case intersections in the South Coast Air Basin. These intersections included: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century Boulevard; (d) Long Beach Boulevard and Imperial Highway.

In the 2003 AQMP, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County with an average daily traffic volume of about 100,000 vehicles per day.[29] This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 (8-hour average) at Wilshire Boulevard and Veteran Avenue.[30] When added to the existing background CO concentrations, these values would be 7.6 ppm (1-hour average) and 5.2 ppm (8-hour average).

[29] *South Coast Air Quality Management District,* 2003 Air Quality Management Plan*, Appendix V: Modeling and Attainment Demonstrations, (2003) V-4-24.*

[30] *The 8-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.*

None of the intersections in the project area have peak hour traffic volumes that exceed those at the intersections modeled in the 2003 AQMP nor do they have any geometric qualities that would result in higher concentrations than the intersections modeled by the SCAQMD. According to the CO attainment demonstration in the AQMP, Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County with daily traffic volumes of about 100,000 per day. The Traffic Impact Analysis by Kunzman Associates, Inc., shows that traffic volumes for project intersections in the project area would be less than 70,000 vehicles per day near the project site and less than 88,000 vehicles per day in the project area.[31] As a result, CO concentrations are expected to be less than 7.6 ppm (1-hour average) and 5.2 ppm (8-hour average), which would not exceed the thresholds. Thus, this comparison provides evidence that the project would not contribute to the formation of CO hotspots and no further CO analysis is required. Therefore, the project would result in less than significant impacts with respect to CO hotspots.

Residential and commercial future projects would not be substantial sources of on-site emissions that would cause an exceedance of the SCAQMD LSTs and would not warrant an LST analysis. Sources such as residential water heaters, commercial-scale boilers result in minimal emissions by virtue of combusting natural gas. Light industrial uses may include stationary sources that could generate on-site emissions that may warrant an LST analysis. The proposed project may include the installation and operation of stationary sources, such as diesel-fired generators for emergency power generation at commercial or retail uses. Unless a blackout occurs, these generators would be operated for only a few hours per month for routine testing and maintenance purposes. The Applicant would be required to obtain a permit to construct and a permit to operate any standby generators under SCAQMD Rules 201, 202, and 203. Under SCAQMD Regulation XIII, all generators must meet BACT requirements to minimize emissions of CO, VOC, and NO_X. SCAQMD Regulation X4 requires operation prior to issuance of a permit, to demonstrate that operation of the proposed generators will not result in an exceedance of LSTs above the established criteria. Therefore the installation and operation of back-up generators would result in less than significant impacts. Thus, localized emissions from the operation of stationary sources resulting from the proposed projects would not exceed LST thresholds and would therefore have less than significant impacts.

(c) Toxic Air Contaminants

(i) Construction Impacts to Off-Site Populations

The greatest potential for TAC emissions during construction activities would be related to emissions of DPM associated with heavy equipment operations during demolition, grading, and trenching activities. In addition, while incidental amounts of substances containing TACs, such as oils, solvents, and paints, could be used, these products would comply with all applicable SCAQMD rules for their manufacture and use and would not contribute substantially to overall health risks from TACs. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The SCAQMD CEQA Air Quality Handbook recommends that sensitive receptors located within one-quarter mile of a facility that emits TACs be considered in an evaluation of TAC-related health impacts. Sensitive receptors located beyond the one-

[31] *Kunzman Associates, Inc., Westgate Specific Plan Traffic Impact Analysis, (2013). Intersection 24 (Cherry Avenue and Baseline Avenue) would have a combined peak hour volume of less than 73,000 (to avoid double counting of vehicles that make right and left turns, this is based on the sum of the average volumes on each roadway). The roadway segment for Foothill Boulevard immediately west of Interstate 15 would have a daily volume of less than 88,000.*

quarter mile distance are generally not required to be evaluated due to atmospheric mixing and dispersion of pollutants.

Construction of a project typically results in temporary and short-term emissions of TACs (i.e., DPM) and would generally not result in a long-term (i.e., 70 years) substantial source of TAC emissions at nearby sensitive receptors. With respect to the proposed project, construction of the 964-acre Westgate Specific Plan area would be periodic through 2035 as the different planning areas are built out. The planning areas for all phases range in size from approximately 0.3 acres to up to 60 acres for the proposed high school in Westgate Village East. While construction of the entire Westgate Specific Plan area would be periodic through 2035, construction associated with any one planning area would be short-term and temporary lasting only a fraction of the total construction time. Since the location of construction activity would shift from location to another, coinciding with the location of each planning area, construction TAC emissions would temporarily affect different sensitive receptors within a one-quarter mile distance. In other words, no single sensitive receptor would be exposed to continuous construction TAC emissions from a construction site located one-quarter miles or closer during buildout of the entire Westgate Specific Plan area. Therefore, it is still the case that construction of the planning areas associated with the Westgate Specific Plan would be expected to result in temporary and short-term emissions of TACs (i.e., DPM) and would generally not result in a long-term (i.e., 70 years) substantial source of TAC emissions at sensitive receptors located within a one-quarter mile of a construction site. As a result, construction TAC emissions would have a less than significant impact.

(ii) Impacts to Off-Site Populations

The primary sources of potential air toxics associated with proposed project operations include diesel particulate matter from delivery trucks (e.g., truck traffic on local streets and on-site truck idling) and emergency backup generators. The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate matter (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[32] The CARB siting guidelines define a warehouse as having more than 100 truck trips or 40 refrigerated truck trips per day. Planning Area 41 could be developed with a high-cube warehouse facility that could result in truck trips. Therefore, an HRA was prepared to assess potential impacts from a high-cube warehouse facility.

According to the traffic study for the project, the high-cube warehouse facility in Planning Area 41 could generate approximately 418 daily truck trips.[33] Only a very small percentage of transportation refrigeration units (TRUs), if any, are anticipated for Planning Area 41. For the purposes of this analysis, the number of TRUs is estimated at 10 percent of the number of trucks. In addition, for the purposes of this analysis, trucks and TRUs are assumed to be diesel-fueled. As Planning Area 41 could result in truck and TRU trips in excess of the CARB siting guidelines, an HRA was performed to estimate potential risks to off-site sensitive receptors.

Diesel exhaust is made up of a number of different individual components, such as benzene, formaldehyde, arsenic, and nickel. These individual components are referred to as speciated components. Each speciated

[32] *South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

[33] *Kunzman Associates, Inc. Westgate Specific Plan Traffic Impact Analysis, (2013).*

component is emitted in different quantities and has different health risk impacts. According to the CARB guidance, *Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines*,[34] the potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multipathway cancer risk from the speciated components. Similarly, the noncancer chronic impacts from inhalation exposure to whole diesel exhaust will generally outweigh the multipathway chronic impacts from the speciated components. Therefore, the cancer risk and noncancer chronic impacts are evaluated via inhalation exposure to whole diesel exhaust, since this would result in the greatest health risk impacts. Neither OEHHA nor CARB have identified noncancer acute impact factors for whole diesel exhaust. As such, the noncancer acute impacts are evaluated via inhalation exposure to the speciated components of diesel exhaust. Only those speciated components with acute impacts are included in this assessment.

The peak hour and daily emissions from trucks and TRUs associated with the high-cube warehouse facility are estimated using the CARB EMFAC2011 on-road mobile source emissions inventory model and the CARB TRU emissions inventory database. It was assumed that trucks would idle on-site for 10 minutes (5 minutes for an inbound trip and 5 minutes for an outbound trip. It was assumed that TRUs would idle on-site for 2 hours to load and/or unload perishable goods. The on-site travel distance was estimated as one-half of the distance between the westernmost and easternmost edges of Planning Area 41. The on-site average travel speeds was assumed to be 15 miles per hour. The off-site travel distances were estimated based on a distance of approximately one-quarter mile from Planning Area 41 along local roadways, freeways, and freeway on- and off-ramps (i.e., Cherry Avenue, Interstate 15, and State Route 210). In order to model potential impacts from truck travel and TRUs at the nearest existing sensitive receptors, the distance along the portion of Cherry Avenue to south of Planning Area 41 was extended to the intersection of Cherry Avenue and Baseline Avenue and includes a one-quarter mile segment along Baseline Avenue, to the west of Cherry Avenue. The off-site average travel speeds was assumed to be 25 miles per hour on roadways and 45 miles per hour on freeways.

For the purposes of this analysis, exhaust PM_{10} emissions from trucks and TRUs were used to represent DPM, assuming that all equipment are fueled with diesel. According to data provided by CARB in the *California Emissions Inventory and Reporting System (CEIDARS) Particulate Matter (PM) Speciation Profiles*, all particulate matter from diesel vehicle exhaust emissions are less than 10 microns in aerodynamic diameter. Therefore, diesel exhaust PM_{10} may be used as a surrogate for DPM emissions. As previously stated, neither OEHHA nor CARB have identified noncancer acute impact factors for whole diesel exhaust. Therefore, acute impacts from DPM must be evaluated based on the speciated components. The speciated components of DPM can be divided into two groups: the VOCs and the particulate matter components. The exhaust total organic gas (TOG) emissions from trucks and TRUs were used to calculate the acute impacts from the organic components of DPM. The acute impacts from the organic components are added to the acute impacts from the particulate matter components of DPM. The speciation fractions for the organic and particulate components were obtained from CARB.[35]

The mass emissions were converted to emission rates in units of grams per second for dispersion modeling purposes. The evaluation of acute 1-hour impacts is based on the maximum peak hour emissions from

[34] *California Air Resources Board, Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines, (2003).*

[35] *California Air Resources Board, "Organic Gas Speciation Profile Reference Information," (09/20/12, Profile 818), and "CEIDARS Particulate Matter (PM) Speciation Profiles," (09/20/12, Profile 425), http://arb.ca.gov/ei/speciate/dnldoptvv10001.php. Downloaded 03/13/2014.*

trucks and TRUs. The evaluation of acute 8-hour impacts is based on the assumption that trucks and TRUs would visit the high-cube warehouse over a 12-hour workday. The evaluation of chronic impacts is based on the maximum annual emissions, generally associated with the assumed first year of operation (i.e., 2018). The evaluation of cancer impacts in based on the 70-year weighted annual average emissions using emission factors from EMFAC2011 corresponding to calendar years 2018, 2020, 2025, 2030, and 2035 and from the TRU emissions inventory database corresponding to calendar years 2018, 2020, and 2025.

Health risks and impacts are evaluated based on the concentration of TACs at a sensitive receptor. Concentrations of DPM due to the operation of the high-cube warehouse were modeled using the U.S. EPA and SCAQMD-approved air quality dispersion model, AERMOD. AERMOD can estimate the air quality impacts of single or multiple point, area, or volume sources using historical meteorological conditions. Volume sources are three-dimensional sources of emissions that can be used to model releases from a variety of industrial uses, including moving diesel trucks and equipment. Volume sources were used to represent the emissions from trucks and TRUs for off-site roadway travel. An area source covering Planning Area 41 was used to represent the emissions from on-site travel and idling. The AERMOD model was run with meteorological data obtained from the SCAQMD for the City of Fontana area. A discrete Cartesian receptor grid was used to determine impacts in the vicinity of the site. Field receptors were placed at 100-meter intervals outside the boundary of Planning Area 41 to cover nearby existing and potential future sensitive receptors in the nearby community and other Planning Areas of the Westgate Specific Plan. Due to the size of the site and the number of model runs required, this receptor grid was determined to provide a balanced approach with respect to receptor coverage and model run times. The SCAQMD requires that AERMOD be run using U.S. EPA regulatory default options, unless non-default options are justified. Since non-default options were not justified, AERMOD was run using the following U.S. EPA regulatory default options: (1) urban dispersion; (2) flagpole receptor height of 0 meters (corresponding to ground-level concentrations); and (3) no building downwash (no point sources were modeled). Thus, the AERMOD complies with SCAQMD requirements with respect to U.S. EPA regulatory default options.

The potential cancer risk is calculated by multiplying the dose by the potency factor. The Unit Risk Value for DPM recommended by the Scientific Review Panel[36] is 3.0 x 10-4 per microgram per cubic meter ($\mu g/m^3$). This value corresponds to a Cancer Potency Factor of 1.1 per milligram/kilogram (body weight) per day (mg/kg(bw)-day). The Unit Risk Value means that for receptors with an annual average concentration of 1 $\mu g/m^3$ in the ambient air, the probability of contracting cancer over a 70-year lifetime of exposure is 300 in 1 million. This Unit Risk Value considers exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for diesel exhaust are not known for these pathways. The Unit Risk Value also assumes that a person is exposed continuously for 70 years. This approach for calculating cancer risk is intended to result in conservative (i.e., health protective) estimates of health impacts and is used for assessing risks to sensitive receptors. Potential impacts to worker receptors assumes that a worker is exposed for 40 years. The results of the analysis are provided in **Table 4.C-8**, *Summary of Maximum Modeled DPM Concentrations and Cancer Risk*. As shown in Table 4.C-8, the maximum increase in cancer risk from the high-cube warehouse would be 2.45 in one million, which is less than 10 in one million for the maximum exposed individual (MEI) receptor. The maximum impact occurs at a receptor located on the southeast fenceline of Planning Area 41. All other receptors exhibit lower concentrations of DPM. Therefore, no significant impacts would occur.

[36] *The Scientific Review Panel is charged with evaluating the risk assessments of substances proposed for identification as toxic air contaminants by CARB, OEHHA, and the Department of Pesticide Regulation (DPR), and the review of guidelines prepared by OEHHA.*

Table 4.C-8

Summary of Maximum Modeled DPM Concentrations and Cancer Risk

Receptor	Modeled DPM Concentration ($\mu g/m^3$)	Incremental Increase in Cancer Risk (in one million)	Significance Threshold (in one million)	Exceeds Threshold?
MEI Worker	0.0077	0.48	10	No
MEI Residential	0.0077	2.45	10	No

Source: PCR Services Corporation, 2014

In addition to the potential cancer risk, DPM has chronic (i.e., long-term) noncancer health impacts. The chronic noncancer Hazard Index for the proposed Project was calculated by dividing the maximum modeled annual average concentration of DPM at the MEI sensitive receptor, using the year with the greatest emissions, by the Reference Exposure Level (REL). The DPM concentration represents the worst-case year; therefore, the chronic non-cancer Hazard Index represents the maximum noncancer chronic health impacts. OEHHA has recommended an ambient concentration of 5 micrograms per cubic meter ($\mu g/m^3$) as the chronic inhalation REL for DPM exhaust. The REL is the concentration at or below which no adverse health effects are anticipated. The maximum chronic Hazard Index at the MEI sensitive receptor is shown in **Table 4.C-9**, *Summary of Maximum Modeled Annual DPM Concentrations and Noncancer Chronic Health Impacts*. The results are based on the highest concentrations at any sensitive receptor point. As shown, the chronic Hazard Index at the MEI is far less than the SCAQMD significance threshold of 1.0 for noncancer health impacts; therefore, impacts would be less than significant.

Components that make up diesel exhaust, such as benzene, formaldehyde, arsenic, and nickel have acute health impacts. Based on the most recent health impact data from OEHHA, acute impacts are assessed for 1-hour and 8-hour averaging periods, depending on the compound.

The acute noncancer Hazard Indices for the proposed Project were calculated for each speciated component by: (1) determining the maximum 1-hour and 8-hour concentration of TOG and DPM at the MEI sensitive receptor, using the maximum hourly and 8-hour work day emissions; (2) multiplying the concentration by the TOG weight fraction for the organic components and the DPM weight fraction for the particulate matter components; and (3) dividing the maximum modeled concentrations at the MEI sensitive receptor by the appropriate REL. As discussed previously, the REL is the concentration at or below which no adverse health effects are anticipated. This process is repeated for each speciated component. The concentrations represent the worst-case 1-hour and 8-hour periods; therefore, the acute noncancer Hazard Indices represent the maximum noncancer acute health impacts. The sum of the acute noncancer Hazard Indices from all speciated components for each target organ represents the total acute health impacts. The maximum acute Hazard Indices at the MEI sensitive receptor are shown in **Table 4.C-10**, *Summary of Maximum Noncancer Acute (1-Hour) Health Impacts* and **Table 4.C-11**, *Summary of Maximum Noncancer Acute (8-Hour) Health Impacts*. The results are shown for the target organ with the highest impacts. The results are based on the highest TOG and DPM concentrations at any sensitive receptor point. As shown, the acute Hazard Indices at the MEI is far less than the SCAQMD significance threshold of 1.0 for noncancer health impacts, therefore impacts would be less than significant.

Table 4.C-9

Summary of Maximum Modeled Annual DPM Concentrations and Noncancer Chronic Health Impacts

Receptor	Modeled Annual DPM Concentration ($\mu g/m^3$)	Maximum Chronic Hazard Index	Target Organ	Significance Threshold	Exceeds Threshold?
MEI Sensitive	0.2919	0.0584	Respiratory System	1.0	No

Source: PCR Services Corporation, 2014

Table 4.C-10

Summary of Maximum Noncancer Acute (1-Hour) Health Impacts

Receptor	Maximum Acute Hazard Index	Target Organ	Significance Threshold	Exceeds Threshold?
Organic Components (affecting the same target organ)				
MEI Residential	0.0069	Eye	1.0	No
Particulate Matter Components (affecting the same target organ)				
MEI Residential	0.0000	Eye	1.0	No
Total Components (affecting the same target organ)				
MEI Residential	0.0069	Eye	1.0	No

Source: PCR Services Corporation, 2014

Table 4.C-11

Summary of Maximum Noncancer Acute (8-Hour) Health Impacts

Receptor	Maximum Acute Hazard Index	Target Organ	Significance Threshold	Exceeds Threshold?
Organic Components (affecting the same target organ)				
MEI Residential	0.0305	Respiratory System	1.0	No
Particulate Matter Components (affecting the same target organ)				
MEI Residential	0.0000	Respiratory System	1.0	No
Total Components (affecting the same target organ)				
MEI Residential	0.0305	Respiratory System	1.0	No

Source: PCR Services Corporation, 2014

Based on this analysis, the health impacts resulting from operation of the high-cube warehouse facility in Planning Area 41 would not exceed the SCAQMD significance threshold of an incremental cancer risk of 10 in one million or the significance threshold of a Hazard Index of 1.0 for chronic and acute impacts. Therefore, the health impacts associated with the high-cube warehouse would be less than significant.

As discussed in Section 2, *Project Description*, Section I, *Land Use*, and the Traffic Impact Analysis by Kunzman Associates[37], future industrial development pursuant to the proposed Specific Plan are part of larger planning areas designated as business parks with the zoning code of Regional Mixed Use (RMU). No warehousing and distribution facilities are permitted in this land use category. Instead, the future industrial uses would likely be linked to and serve more of a supporting role to the office land uses. Based on this supportive role, the industrial uses would likely be below average truck generators. Thus, no future projects or uses that would generate the level of truck trips expected for a warehouse are proposed as part of the Specific Plan. Therefore, the project is not considered to be a substantial source of diesel particulate matter warranting a refined HRA.

As mentioned previously, the CARB mandated ATCM limits diesel fueled commercial vehicles (delivery trucks) to idle for no more than five minutes at any given time. The increase in potential localized air toxic impacts from on-site sources of diesel particulate emissions would be minimal since the proposed project would not result in substantial numbers of heavy-duty trucks. Therefore, further analysis is not necessary, and this ATCM would significantly limit any potential incremental increase in emissions from possible truck activity.

The proposed project may include the installation and operation of diesel-fired generators for emergency power generation at commercial or retail uses. Unless a blackout occurs, these generators would be operated for only a few hours per month for routine testing and maintenance purposes. The Applicant would be required to obtain a permit to construct and a permit to operate any standby generators under SCAQMD Rules 201, 202, and 203. Under SCAQMD Regulation XIII, all generators must meet BACT requirements to minimize emissions of PM_{10}. SCAQMD Regulation X4 requires operation prior to issuance of a permit, to demonstrate that operation of the proposed generators will not result in increased health risk due to TAC exposures above the established criteria. Therefore the installation and operation of back-up generators would result in less than significant impacts.

(iii) Impacts to On-Site Populations

While the City provides the following informational analysis, and includes proposed mitigation measures consistent with this analysis, this is not an environmental effect caused by the development of the Specific Plan caused by the existing environment.

The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective (March 2005)* provides recommendations for siting sensitive land uses (e.g., residences) within certain distances of facilities that are known to emit TACs (e.g., freeways, refineries, rail yards, ports, etc.). A key air pollutant common to these

[37] *Kunzman Associates, Inc. Westgate Specific Plan Traffic Impact Analysis, (2013).*

sources is particulate matter from diesel engines. Exposure to sources of air toxics may increase both cancer and non-cancer health risks. Therefore, CARB recommends that proximity be considered in the siting of new sensitive land uses. The CARB's recommendations are based primarily on data showing that the air pollution exposure can be reduced as much as 80 percent with recommended separation. The CARB also recommends that site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses. The recommendations are advisory and should not be interpreted as defined "buffer zones." The *Air Quality and Land Use Handbook* states that it is up to lead agencies to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.[38] In addition, the CARB recognizes that site-specific analysis is preferred over use of the recommended site distances, which is similar to a screening level approach.

According to the proposed site plan, planning areas that may include residential uses could be located within 500 feet of I-15 and I-210. The *Air Quality and Land Use Handbook*, recommends that lead agencies, where possible, avoid citing new sensitive land uses within 500 feet of a freeway due to elevated MSAT emissions.[39] According to the SCAQMD, "exposure to vehicle-related air contaminants and the potential for adverse health effects is greatly reduced at approximately 300 feet from the edge of the roadway."[40] At 300 feet from the edge of a roadway, health effects approach background levels. At 500 feet from the edge of a roadway, health effects are equivalent to background levels. While the 500 foot distance is not a regulatory requirement, based on the proximity of residential uses to the I-15 and I-210 freeways and associated MSAT emissions, an HRA was performed to assess health impacts to future on-site residences. The HRA utilized detailed dispersion modeling (AERMOD/ISCST3), emission factors from EMFAC2011 emissions inventory model, and traffic data for the I-15 and I-210 freeway obtained from the Caltrans Traffic Operations Department. Sources included as part of the health risk assessment include the I-15 and I-210 freeway segments located within one-quarter mile of the project site. The following HRA analysis and proposed mitigation measures, consistent with the analysis, is not an environmental effect caused by the development of the Specific Plan, rather it is an example of an effect on the users of the Specific Plan caused by the existing environment.

OEHHA has established risk factors for TACs based on a 70-year continuous exposure and provides methodologies to account for lesser exposure durations such as those representing student exposure-duration (9-year minimum, 180 days per year) and employee-duration (40-years, 240 days per year). The established methodologies and 70-year exposure duration corresponds to a lifetime risk of cancer. According to OEHHA, there is no recognized methodology for assessing an exposure duration of less than 9 years.

The specific calculations and assumptions used to determine the cancer risks are included in Appendix B of this Draft EIR. The risk assessment followed in this analysis is designed to produce conservative (high) estimates of the risk posed by TACs. The conservative nature of the analysis is due to the following factors:

---

[38] *California Air Resources Board,* Air Quality and Land Use Handbook*, (2005) p. 4.*

[39] *California Air Resources Board,* Air Quality and Land Use Handbook*, (2005) p. 8-9. The 2002 study of impacts along the San Diego (I-405) Freeway and the Long Beach (I-710) Freeway cited by CARB in its* Air Quality and Land Use Handbook *found a substantial reduction in pollutant concentrations, relative exposure, and health risk beyond 300 feet.*

[40] *South Coast Air Quality Management District, "Fact Sheet Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning," http://www.aqmd.gov/prdas/aqguide/fact_sheet.html. 2010.*

- As a conservative measure, the SCAQMD does not recognize indoor adjustments for residents. However, studies have shown that the typical person spends approximately 87 percent of their time indoors, 5 percent of their time outdoors, and 7 percent of their time in vehicles. A diesel particulate matter exposure assessment showed that an average indoor concentration was 2.0 µg/m^3, compared with an outdoor concentration of 3.0 µg/m^3.[41]
- The AERMOD air dispersion model as applied in this study is also designed to provide conservative estimates of air pollutant concentrations during construction.

As shown in **Table 4.C-12**, *Unmitigated Westgate Specific Plan - Cancer Risk Calculations,* the threshold for significance used to evaluate the exposure to TACs is 10 excess cancer cases per one million people. This is the threshold recommended by the SCAQMD and the CARB explicitly to characterize impacts attributable to projects that introduce new sources of TAC emissions in an area.

Table 4.C-12

Unmitigated Westgate Specific Plan - Cancer Risk Calculations

Land Use	Cancer Risk (# in one million)
Residence	47
Maximum Individual Cancer Risk Threshold	10
Exceeds Threshold?	Yes

Source: PCR Services Corporation, 2012

As shown in Table 4.C-12, future on-site residents could be exposed to MSATs from I-15 and I-210 that would results in an incremental increase in cancer risk greater than 10 in one million. Therefore, cancer risk impacts to on-site residents within 500 feet of I-15 and I-210 would be considered significant.

Potential non-cancer effects of chronic (i.e., long term) and acute (i.e., short term) exposures were evaluated using the hazard quotient approach as described in the OEHHA Guidance. The hazard quotient approach is accomplished by dividing the modeled pollutant annual average concentration by the appropriate chronic or acute REL. The REL is the concentration at or below which no adverse health effects are anticipated. To determine the cumulative non-cancer chronic or acute health impacts from the emission of multiple substances by the inhalation route, the hazard index is calculated. The hazard index is the sum of all hazard quotients from all the substances that affect the same organ system (e.g., respiratory system, cardiovascular system, reproductive system). Not every TAC affects the same target organ. For example, benzene and 1,3-butadiene do not have chronic impacts on the respiratory system. A hazard index equal to or greater than 1.0 represents a significant chronic or acute health hazard.

As shown in **Table 4.C-13**, *Unmitigated Westgate Specific Plan - Non-Cancer Chronic and Acute Calculations,* the threshold for significance used to evaluate the exposure to TACs is 10 excess cancer cases per one million

[41] *South Coast Air Quality Management District (SCAQMD), 2002. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions.*

Table 4.C-13

Unmitigated Westgate Specific Plan - Non-Cancer Chronic and Acute Calculations

Land Use	Chronic Hazard Index	Acute Hazard Index (1-hour)
Residence	0.220	0.009
Total Hazard Index	1.0	1.0
Exceeds threshold?	No	No

Source: PCR Services Corporation, 2012

people. This is the threshold recommended by the SCAQMD and the CARB explicitly to characterize impacts attributable to projects that introduce new sources of TAC emissions in an area.

As shown in Table 4.C-13, future on-site residents would not be exposed to chronic and acute impacts that would exceed the threshold of 1.0. Therefore, non-cancer chronic and acute impacts to on-site residents within 500 feet of I-15 and I-210 would be considered less than significant. No heavy industrial uses are proposed as part of the Specific Plan. However, it is likely that some residential uses may be placed in proximity of proposed light industrial and commercial uses that may store or use toxic or hazardous materials, posing a potential health hazard to sensitive land uses such as residences. At this stage in the planning process, it is speculative to assume placement of hazardous waste generating uses in relation to residential uses or whether such uses would emit air toxics. Therefore, an HRA of on-site light industrial and commercial uses cannot be explicitly performed. However, if sensitive land uses would be sited in close proximity to these light industrial and commercial uses within the recommended separation distance in the CARB *Air Quality and Land Use Handbook*, impacts would be potentially significant. Mitigation is provided to ensure that future development pursuant to the proposed Specific Plan do not locate within the separation distance recommended in the CARB *Air Quality and Land Use Handbook* or that dispersion modeling is performed to assess health impacts for future projects that do locate sensitive land uses within the recommended separation distance.

(5) Odors

Threshold	Would the project create objectionable odors affecting a substantial number of people?

Impact 4.C-5 *Implementation of the proposed Specific Plan would not create objectionable odors affecting a substantial number of people. Future development pursuant to the proposed Specific Plan consists of residential, commercial, educational, and recreational uses and are not expected to be a source of off-site odor complaints. In addition, the project is not located near any sources of odors identified by the SCAQMD handbook. Therefore, implementation of the Westgate Specific Plan would have a less than significant impact.*

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents and diesel-powered on- and off-road equipment. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed which would create objectionable odors.

Therefore, no impact would occur during construction of the proposed project and no mitigation measures would be required.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Westgate Specific Plan does not include any uses identified by the SCAQMD as being associated with odors. Future development pursuant to the proposed Specific Plan consists of residential, commercial, educational, and recreational uses and is not expected to be a source of off-site odor complaints. In addition, the project is not located near any sources of odors identified by the SCAQMD handbook. Therefore, implementation of the Westgate Specific Plan would have a less than significant impact.

4. CUMULATIVE IMPACTS

a. Construction

Of the four related projects that have been identified in the vicinity of the Westgate Specific Plan area, all have either not yet been built or are currently under construction. Since the Applicant has no control over the timing or sequencing of the related projects, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be entirely speculative. For this reason, the SCAQMD's methodology to assess a project's cumulative impact differs from the cumulative impacts methodology employed elsewhere in this Draft EIR.

With respect to the project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal Clean Air Act mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the proposed project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects Basin-wide, which would include each of the related projects mentioned above. Nevertheless, construction-period NO_X and VOC mass regional emissions associated with the proposed Westgate Specific Plan are already projected to result in a significant impact to air quality. As such, cumulative impacts to air quality during proposed project construction would also be significant and unavoidable. As discussed under Impact 4.C-2, construction emissions would be temporary and represent a fraction of a percent of the total Basin's emissions inventory. Given that the emissions would constitute a very small portion of the Basin's emissions and would occur over a relatively large area and given that meteorological effects, such as wind, would disperse the pollutants, it is unlikely that the temporary emissions from construction activities associated with development under the proposed project would result in an increase in the respective pollutant concentrations in proximity to the Westgate Specific Plan area or elsewhere in the Basin to a degree that measureable heath impacts would occur.

Similar to the proposed Westgate Specific Plan, the greatest potential for TAC emissions at each related project would involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air

toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The proposed Westgate Specific Plan's contribution to cancer risk from construction activities would be less than significant. Related projects that have not already been built would not result in a long-term (i.e., 70 years) substantial source of TAC emissions with no residual emissions after construction and corresponding individual cancer risk. Thus, TAC emissions from the related projects are anticipated to be less than significant individually and cumulatively.

Also similar to the proposed Westgate Specific Plan, potential sources that may emit odors during construction activities at each related project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of volatile organic compounds from architectural coatings and solvents. Via mandatory compliance with SCAQMD Rules, it is anticipated that construction activities or materials used in the construction of the related projects would not create objectionable odors. Thus, odor impacts from the related projects are anticipated to be less than significant individually, as well as cumulatively in conjunction with the proposed Westgate Specific Plan.

b. Operation

The SCAQMD's approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the Federal and State Clean Air Acts. As discussed earlier, the SCAQMD has developed a comprehensive plan, the 2007 AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant. Because the Basin is currently in nonattainment for ozone, PM_{10} and $PM_{2.5}$, and the San Bernardino County portion of the Basin is additionally in nonattainment for NO_2, related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, CEQA Guidelines Sections 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

> *"A lead agency may 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 which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) 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…"*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the project's incremental contribution to cumulative air quality impacts is determined based on compliance with the South Coast Air Quality Management District's (SCAQMD) adopted 2007 Air Quality Management Plan (AQMP).

The proposed Westgate Specific Plan would not conflict with or obstruct implementation of the applicable air quality plan, which in this case is the AQMP. A project is deemed inconsistent with air quality plans if it results in population and/or employment growth that exceeds growth estimates in the applicable air quality plan. In turn, the AQMP relies upon growth projections adopted by SCAG, which in turn, relies upon adopted General Plan growth projections. Consequently, compliance with the City's General Plan typically results in compliance with the AQMP.

As discussed above, implementation of the Westgate Specific Plan would result in population and/or employment growth that exceeds growth estimates contained in the AQMP. Although the project would comply with all rules and regulations as implemented by the SCAQMD and the CARB, and would conform to the standards and guidelines of the City of Fontana General Plan, it would exceed the growth estimates for the project site contained in the AQMP and would also result in short- and long-term exceedances of established emissions thresholds, it was determined that the proposed Westgate Specific Plan was not consistent with the AQMP. Thus, given the project's inconsistency with the AQMP, the project's incremental contribution to cumulative air quality effects is cumulatively considerable, per CEQA Section 15064(h)(3).

However, SCAQMD no longer recommends relying solely upon consistency with the AQMP as an appropriate methodology for assessing cumulative air quality impacts. Instead, SCAQMD's approach to determining cumulative air quality impacts for criteria air pollutants is to first determine whether or not the proposed project would result in a significant impact to regional air quality based on SCAQMD significance thresholds. If not, then the lead agency needs to consider the additive effects of related projects only if the proposed project is part of an ongoing regulatory program or is contemplated in a Program EIR, and the related projects are located within approximately one mile of the project site; conditions not applicable to the proposed project.

The SCAQMD recommends that project specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As discussed above, peak daily operation-related emissions for both Phase I development and buildout of the Westgate Specific Plan would exceed SCAQMD regional significance thresholds. By applying SCAQMD's cumulative air quality impact methodology, implementation of the proposed Westgate Specific Plan would result in an addition of criteria pollutants such that cumulative impacts, in conjunction with related projects in the region, would occur. Therefore, the emissions of non-attainment pollutants and precursors generated by project operation in excess of the SCAQMD thresholds would be cumulatively significant. As discussed under Impact 4.C-2, operational emissions would represent a fraction of a percent of the total Basin's emissions inventory. Given that the emissions would constitute a very small portion of the Basin's emissions and would occur over a relatively large area and given that meteorological effects, such as wind, would disperse the pollutants, it is unlikely that the emissions from operations would result in an increase in the respective pollutant concentrations in proximity to the Westgate Specific Plan area or elsewhere in the Basin to a degree that measureable heath impacts would result.

With respect to TAC emissions, neither the proposed Westgate Specific Plan nor any of the identified related projects (which are largely residential, educational, and retail/office developments), would represent a substantial source of long-term TAC emissions. Uses typically associated with TAC emissions include large-scale industrial, manufacturing, and transportation hub facilities. Based on recommended screening level siting distances for TAC sources, as set forth in the CARB's Land Use Guidelines, the project and related projects would not result in a cumulative impact requiring further evaluation. However, the project and each

of the related projects would likely generate minimal TAC emissions related to the use of consumer products, landscape maintenance activities, among other things. As mentioned previously, the project is not expected to include gasoline dispensing land uses or boilers. Pursuant to the law enacted in 1983 by California Assembly Bill 1807 (Tanner, Stats. 1983, ch. 1047), as amended,[42] which directs the CARB to identify substances such as TAC and adopt ATCMs to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation X4) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. In addition, the project would not result in any sources of TACs that have been identified by Land Use Guidelines, and thus, would not contribute to a cumulative impact.

With respect to potential odor impacts, neither the proposed project nor any of the related projects (which are primarily general office, residential, retail, and educational uses) have a high potential to generate odor impacts.[43] Furthermore, any related project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement BACT to limit potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from related projects are anticipated to be less than significant individually and cumulatively.

5. MITIGATION MEASURES

The following mitigation measures are intended to set forth a program of air pollution control strategies designed to reduce the proposed Westgate Specific Plan's air quality impacts to the extent feasible during construction and operation.

a. Construction

Mitigation Measure C-1 To minimize potential construction-period VOC impacts, the City shall require future projects to use architectural coatings which meet the SCAQMD "super-compliant" VOC standard of <10 g/L, if readily available from commercial suppliers.

Mitigation Measure C-2 During project construction, the City shall require internal combustion engines/construction equipment operating on future project sites greater than five acres to meet the following:

- At least 50 percent of construction equipment greater than 250 hp, which are on-site for 6 or more consecutive work days, shall meet Tier 3 emissions standards or better and be outfitted with BACT devices (e.g., Level 3 diesel emissions control devices) certified by CARB.
- Post-January 1, 2016, in additional to the Tier 3 standards specified above, an additional 20 percent or more of construction equipment greater than 250 hp, which are on-site for 6 or more consecutive work days, shall meet Tier 4 and be

[42] *Calif. Health and Safety Code §§ 39650 et seq.*

[43] *According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not include these odor-generating land uses,*

outfitted with BACT devices (e.g., Level 3 diesel emissions control devices) certified by CARB.

- A copy of each unit's certified tier specification and BACT documentation shall be available for inspection during construction. The contractor(s) shall monitor and record compliance for each project construction phase and document efforts undertaken to increase the use of compliant off-road vehicles, such as but not limited to bid solicitation documents, fleet registration of successful vendor(s), etc.

Mitigation Measure C-3 Construction contractors supplying heavy duty diesel equipment, greater than 50 hp, will be encouraged to apply for AQMD SOON funds. Information including the AQMD website will be provided to each contractor which uses heavy duty diesel for on-site construction activities.

Mitigation Measure C-4 All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site.

Mitigation Measure C-5 All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Mitigation Measure C-6 General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions by implementing the following construction measures:

- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
- Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
- Reroute construction trucks away from congested streets or sensitive receptor areas.
- Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM_{10} generation.
- Improve traffic flow by signal synchronization.
- Require the use of electricity from power poles rather than temporary diesel of gasoline powered generators.

Mitigation Measure C-7 The City shall require future projects to comply with the following SCAQMD Applicable Rule 403 (Fugitive Dust) Measures:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Water active sites at least three times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).

- All trucks hauling dirt, sand, soil, or other loose materials are to be covered, or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Cease grading during periods when winds exceed 25 miles per hour.
- Pave construction access roads at least 100 feet onto the site from main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.
- Stockpiled dirt may be covered with a tarp to reduce the need for watering or soil stabilizers.

Mitigation Measure C-8 The City shall require future projects greater than five acres to conduct individual localized impact analysis using dispersion modeling. If such analysis produces significant impacts, with respect to the SCAQMD air quality standards, future projects must mitigate impacts to the extent possible utilizing approved mitigation measures such as those outlined in Mitigation Measures C-1 through C-7.

b. Operation

Mitigation Measure C-9 The City shall require future commercial and industrial projects with 250 or more employees to provide incentives for employees to use public transportation such as discounted transit passes, reduced ticket prices, and/or other incentives.

Mitigation Measure C-10 The City shall require future commercial and industrial projects with 250 or more employees to provide incentives for employees and the public to reduce single-occupancy vehicle trips by implementing ridesharing programs, such as carpools/vanpools, and shall provide bicycling facilities such as secured bicycle parking, and employee lockers and showers.

Mitigation Measure C-11 The City shall require future commercial and industrial projects with loading docks or delivery trucks to prohibit idling of on- and off-road heavy-duty diesel vehicles for prolonged periods pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes. Such projects shall be required to post signage at all loading docks and/or delivery areas directing drivers to shut down their trucks after five minutes of idle time. Also, project site employers who own and operate truck fleets shall be required to inform their drivers of the anti-idling policy.

Mitigation Measure C-12 The City shall require future commercial and industrial projects with loading docks or dedicated delivery areas to provide on-site electrical connections for TRUs and require that all electric-capable TRUs utilize the connections when in use on-site. Such projects shall be required to post signage at all loading docks and/or dedicated delivery areas directing electric-capable TRU operators to utilize the connections.

Mitigation Measure C-13 The City shall require future residential, commercial, and industrial projects promote the expanded use of renewable fuel and low-emission vehicles by including one or both of the following project components: provide preferential parking

for ultra-low emission, zero-emission, and alternative-fuel vehicles; and provide electric vehicle charging stations within the development.

Mitigation Measure C-14 The City shall require future projects to provide linkages and connections to adjacent off-site trails, walkways, and other pedestrian commuting routes.

Mitigation Measure C-15 The City shall require future projects with industrial uses to conduct individual localized impact analysis using SCAQMD LST assessment (projects less than 5 acres) or dispersion modeling (projects greater than 5 acres). If such analysis produces significant impacts, with respect to the SCAQMD air quality standards, future projects must mitigate impacts using approved mitigation measures such as those outlined in Mitigation Measures C-9 through C-14.

Mitigation Measure C-16 Prior to future project approval, plans demonstrating that residential units are to be located a minimum of 200 feet from the nearest right of way of Interstate 15 or State Route 210 and that the units would be equipped with high-efficiency air filters shall be submitted to the City for review and approval. Residential units located within 500 feet from the closest right of way of Interstate 15 or State Route 210 shall be equipped with high-efficiency air filters with a rating of MERV 8 or better.

Mitigation Measure C-17 Prior to future project approval, plans shall demonstrate that sensitive uses are to be located a minimum separation distance from light industrial and commercial uses, as recommended in the CARB *Air Quality and Land Use Handbook*. For future projects that result in sensitive uses within the recommended separation distance, an analysis, such as a project-level health risk assessment, shall demonstrate compliance with the SCAQMD health risk thresholds of significance or are mitigated to the extent feasible.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Construction

Implementation of the mitigation measures described above would reduce regional and local construction emissions for all pollutants. Further, as shown in **Table 4.C-14**, *Mitigated Proposed Westgate Specific Plan - Estimate of Phase 1 Construction Emissions*, the project with mitigation would not exceed thresholds for regional emissions for VOC, CO, SO_X, or $PM_{2.5}$. However, after mitigation, the proposed Westgate Specific Plan would remain in exceedance of the SCAQMD regional significance thresholds for PM_{10} and NO_X during the most intense construction periods. As noted above, the analysis represents a worst case scenario, and the significant impacts would be less during the overall duration of construction than indicated for the maximum conditions. Notwithstanding, project construction would continue to result in a significant unavoidable regional impact even with incorporation of all feasible mitigation measures.

Actual construction activities would on average occur at a somewhat reduced level compared to the maximum predicted day and would have a corresponding reduction in pollutant emissions. Therefore, the modeled set of conservative assumptions likely overstates the potential localized impacts. As discussed, mitigation measures for the proposed Westgate Specific Plan also require future projects greater than five acres to conduct individual impact analyses for construction activities and to mitigate impacts, if any, to the extent possible. Thus, actual construction period emissions would likely be less than shown in Table 4.C-9.

Table 4.C-14

Mitigated Proposed Westgate Specific Plan - Estimate of Phase 1 Construction Emissions [a] (pounds per day)

Regional Emissions

	VOC	NOx	CO	SOx	PM_{10} [b]	$PM_{2.5}$ [b]
Individual Phases						
Site Preparation	5	51	43	1	12	8
Grading	23	274	191	<1	28	18
Construction	17	110	140	<1	17	8
Paving	5	45	33	<1	3	2
Architectural Coating	49	10	19	<1	3	1
Maximum Regional Emissions	**71**	**274**	**192**	**1**	**28**	**18**
Regional Significance Threshold	75	100	550	150	150	55
Over (Under)	(4)	174	(358)	(149)	(122)	(37)
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**Yes**	**No**

[a] *Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the URBEMIS model printout sheets and/or calculation worksheets that are presented in Appendix B.*

[b] *PM_{10} and $PM_{2.5}$ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.*

Source: PCR Services Corporation, 2014

It should also be noted that numerical exceedances of mass emissions thresholds do not equal a violation of ambient air quality standards. In addition, a significant portion of the VOC, NO_X, and PM_{10} emissions shown results from mobile sources associated with hauling and worker commutes, as discussed previously, and would thus be dispersed in their emission, further reducing localized impacts. However, the proposed Westgate Specific Plan would have no control over the construction-period activities of individual future projects, and predictions on the extent to which required mitigation measures would reduce construction-period emissions would be speculative. Therefore, the conclusion remains that impacts during construction would be significant and unavoidable for regional PM_{10} and NO_X emissions even with incorporation of all feasible mitigation measures. Cumulative impacts associated with construction of the project described above would also remain significant.

b. Operation

As discussed above, operation of the proposed Westgate Specific Plan at completion of Phase I would cause emissions of VOC, NO_X, CO, and PM_{10} which exceed the SCAQMD regional daily thresholds. Operation at full buildout would cause exceedances of VOC, NO_X, CO, PM_{10} and $PM_{2.5}$. It should be noted that the scenarios analyzed presented conservative, worst-case emissions and that numerical exceedances of mass emissions thresholds do not equal a violation of ambient air quality standards. Mitigation measure C-12 requires future projects to conduct individual impact analyses on operational activities and to mitigate impacts, if any, to the extent possible. Thus, it is likely that, after mitigation, actual emissions resulting from operation of the proposed Westgate Specific Plan at either Phase I or full buildout would be less than projected. Mitigation measure C-13 requires future development pursuant to the proposed Specific Plan to submit plans

demonstrating that sensitive uses are to be located a minimum separation distance from light industrial and commercial uses, as recommended in the CARB *Air Quality and Land Use Handbook*. For future projects that result in sensitive uses within the recommended separation distance, an analysis shall demonstrate compliance with the SCAQMD health risk thresholds of significance or that such projects are mitigated to the extent feasible. Thus, localized impacts resulting from the operation of the proposed Westgate Specific Plan to nearby sensitive receptors would be minimized. In addition, a high percentage of the emissions shown in Table 4.C-5 results from mobile sources, as discussed previously, and would thus be dispersed in their emission, further reducing localized impacts. Localized impacts from emissions of CO, the pollutant of greatest concern, would also be less than significant, as mentioned above. However, the proposed Westgate Specific Plan has no control over the operational activities of individual future projects, and predictions on the extent to which required mitigation measures would reduce operational emissions would be speculative. Therefore, the conclusion remains that impacts during operation of the proposed Westgate Specific Plan would be significant and unavoidable even with incorporation of all feasible mitigation measures. Cumulative impacts associated with operation of the project described above would also remain significant.

The proposed Westgate Specific Plan would pose a significant health risk to on-site sensitive receptors due to the proximity of proposed planning areas with residential development to freeways. Mitigation measure C-16 requires future development pursuant to the proposed Specific Plan to submit plans demonstrating that residential units are to be located a minimum of 200 feet from the nearest right of way of I-15 or I-210 to the City for review and approval. Residential units located within 500 feet from the closest right of way of Interstate 15 or State Route 210 shall be equipped with high-efficiency air filters with a rating of MERV 8 or better. Such filters have an arrestance rate of 80 to 95 percent for DPM.[44] However, as shown in **Table 4.C-15**, *Mitigated Proposed Westgate Specific Plan - Cancer Risk Calculations,* assuming 85 percent removal efficiency by the air filters, implementation of this mitigation measure would reduce the maximum cancer risk to 33 in a million, which would not be below the maximum individual cancer risk threshold of 10 in a million. Therefore, operational impacts of the proposed Westgate Specific Plan with respect to health risks following mitigation would be significant and unavoidable.

Table 4.C-15

Mitigated Proposed Westgate Specific Plan - Cancer Risk Calculations

Land Use	Cancer Risk (# in one million)
Residence	33
Maximum Individual Cancer Risk Threshold	10
Exceeds Threshold?	Yes

Source: PCR Services Corporation, 2012

Additionally, despite the project's increase in development intensity on-site relative to that reflected in the City's General Plan and the project-related exceedance of established emissions thresholds during construction and operation of proposed uses, impacts related to consistency with air quality plans would be

[44] *The American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Standard 52.2*

considered less than significant. This is because the project would implement all feasible mitigation measures to reduce air pollutant emissions, consistent with the applicable policies of the General Plan.

As such, if the City of Fontana approves the project, the City shall be required to cite their findings in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.

4. ENVIRONMENTAL IMPACT ANALYSIS
D. BIOLOGICAL RESOURCES

1. INTRODUCTION

This section describes applicable regulations and biological resources that occur or have potential to occur on the site or in the vicinity, and presents an analysis of potential impacts to biological resources that could occur with implementation of the proposed Specific Plan. The analysis in this section is based on a Biological Resources Assessment (BRA) performed by PCR Services Corporation in August 2012 and revised in March 2014, which is included as Appendix C of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

The approximately 964-acre study area is located within the City of Fontana (City), in San Bernardino County. The Falcon Ridge Village portion of the study area consists of non-native and disturbed plant communities in addition to a retail development (Falcon Ridge Town Center). Both the Westgate Center and Westgate Village East portions of the study area consist of predominately former vineyards, in addition to non-native and disturbed plant communities. The Westgate Village portion of the study area consists of a mix of non-native and disturbed plant communities, former vineyards, and native Riversidean sage scrub and Riversidean alluvial fan sage scrub plant communities. Approximately 7.69 acres of the northern portion of the Falcon Ridge Village is within the proposed North Fontana Multi-Species Habitat Conservation Plan (MSHCP) planning area (refer to **Figure 4.D-1,** *Relationship to the Interim MSHCP*, below). The Falcon Ridge Village portion of the study area is also within United States Fish and Wildlife Service (USFWS)-designated critical habitat for the San Bernardino Kangaroo Rat (SBKR) based on the adopted 2002 mapping; the proposed 2008 revisions to SBKR critical habitat excluded the study area but was invalidated in 2011 (refer to **Figure 4.D-2,** *Critical Habitat*, below). As shown in Figure 4.D-2, critical habitat for arroyo toad (*Bufo californicus*) associated with Lytle Creek and Cajon Wash is also mapped to the northeast of the study area, and to the northwest critical habitat is mapped for mountain yellow legged frog (*Rana muscosa*) from within the San Bernardino National Forest. Critical habitat for coastal California gnatcatcher (*Polioptila californica californica*), southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's Vireo (*Vireo bellii pusillus*) also occur south of the study area.

The study area supports three (3) drainage features observed to support field indicators associated with United States Army Corps of Engineers (USACE), Santa Ana Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW)[1] (collectively "the resource agencies") jurisdictional waters. The Falcon Ridge Village portion of the study area is within close proximity to maintained drainage features such as one (1) "roadside ditch" and three (3) detention basins that do not appear to support federal or State jurisdictional waters. The Westgate Center portion of the study area supports one (1) maintained

[1] *California Department of Fish and Wildlife (CDFW) were previously known as the California Department of Fish and Game (CDFG). The name change was effective on January 1, 2013.*

trapezoidal concrete channel that is likely regulated by the resource agencies. The Westgate Village portion of the study area supports a segment of the Etiwanda (Creek) Channel which is a concrete trapezoidal channel considered to support resource agency jurisdiction. No jurisdictional features occur on the Westgate Center East portion of the study area. However, the San Sevaine concrete trapezoidal channel is a jurisdictional feature located off-site, adjacent to the northern boundary of both the Westgate Center and Westgate Center East portions of the study area.

The topography is relatively flat throughout the study area, with elevations ranging from approximately 1,298 feet above mean sea level (MSL) in the southwestern portion to approximately 1,670 feet above MSL in the northeastern portion. Mapped soils in the study area are dominated by Tujunga Gravelly Loam sand (0-9 percent slopes), in addition to Handford Coarse Sandy Loam (2-9 percent slopes) and Soboba Gravelly Loamy Sand (0-9 percent slopes). Surrounding land uses include residential development in all directions, I-15 to the immediate northeast, unimproved vacant properties to the northeast and northwest, and some commercial/industrial areas to the south. Lytle Creek occurs to the northeast of the study area.

(1) Plant communities

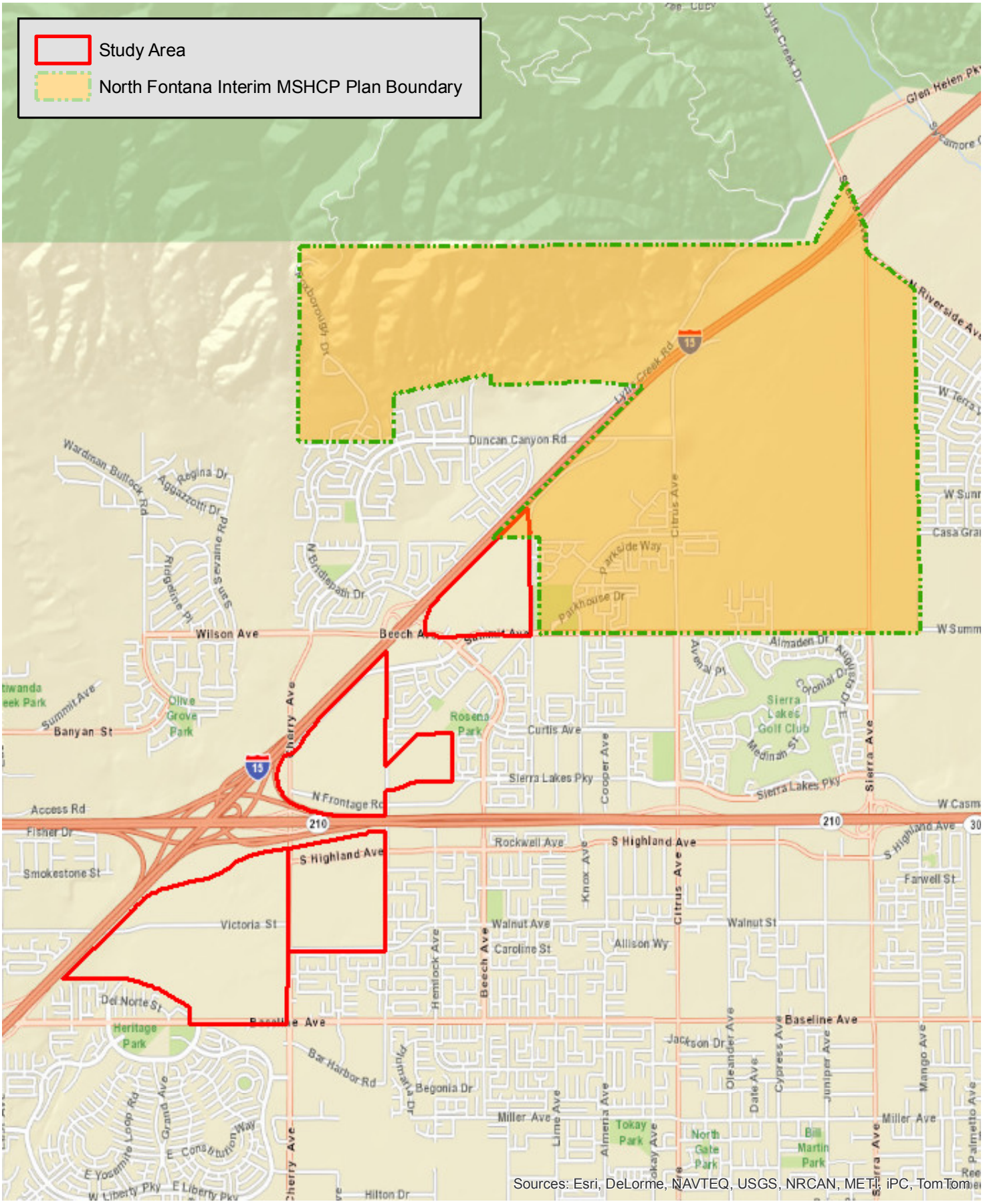
Descriptions of each of the plant communities found within the study area are provided below, and locations of each of the plant communities are shown below in **Figure 4.D-3**, *Plant Communities*. **Table 4.D-1**, *Plant Communities* lists each of the plant communities observed as well as the acreage within the study area.

Table 4.D-1

Plant Communities

Plant Community	Falcon Ridge Village	Westgate Center	Westgate Village	Westgate Village East	Total (acres)
Developed	44.40	16.37	36.19	13.42	**110.38**
Disturbed	20.84	30.49	77.99	20.80	**150.12**
Disturbed/Ruderal	0.0	0.0	34.13	0.0	**34.13**
Ruderal	0.0	25.87	0.0	0.0	**25.87**
Ruderal/Disturbed	0.42	13.30	97.10	3.42	**114.24**
Former Vineyard	0.0	141.90	118.10	146.99	**406.99**
Windrow	0.0	1.32	2.15	0.0	**3.47**
Landscaped	0.0	4.57	0.21	0.0	**4.78**
Non-native Grassland	7.25	4.53	0.0	0.0	**11.78**
Non-native Grassland/Disturbed	63.70	0.0	0.0	0.0	**63.70**
Riversidean Sage Scrub	0.0	0.0	23.62	0.0	**23.62**
Disturbed Riversidean Sage Scrub	0.0	0.0	0.46	0.0	**0.46**
Riversidean Alluvial Fan Sage Scrub/Disturbed	0.0	0.0	5.23	0.0	**5.23**
Disturbed Riversidean Alluvial Fan Sage Scrub	0.0	0.0	9.22	0.0	**9.22**
Total	**136.61**	**238.35**	**404.40**	**184.63**	**963.99**

Source: PCR Services Corporation, 2012 and 2014.



Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, iPC, TomTom

PCR

N

0 3,500 7,000 Feet

Relationship to the Interim MSHCP

Westgate Specific Plan

Source: City of Fontana, Hall & Foreman Inc., 2012; PCR Services Corporation, 2012.

FIGURE

4.D-1

Study Area

Critical Habitat

- Arroyo Toad
- Coastal California Gnatcatcher
- Southwestern Willow Flycatcher
- Mountain Yellow Legged Frog
- Least Bell's Vireo
- SBKR 2008 Designated Critical Habitat (Invalidated 2011)
- SBKR 2002 Designated Critical Habitat

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

N

0 1.5 3 Miles

PCR

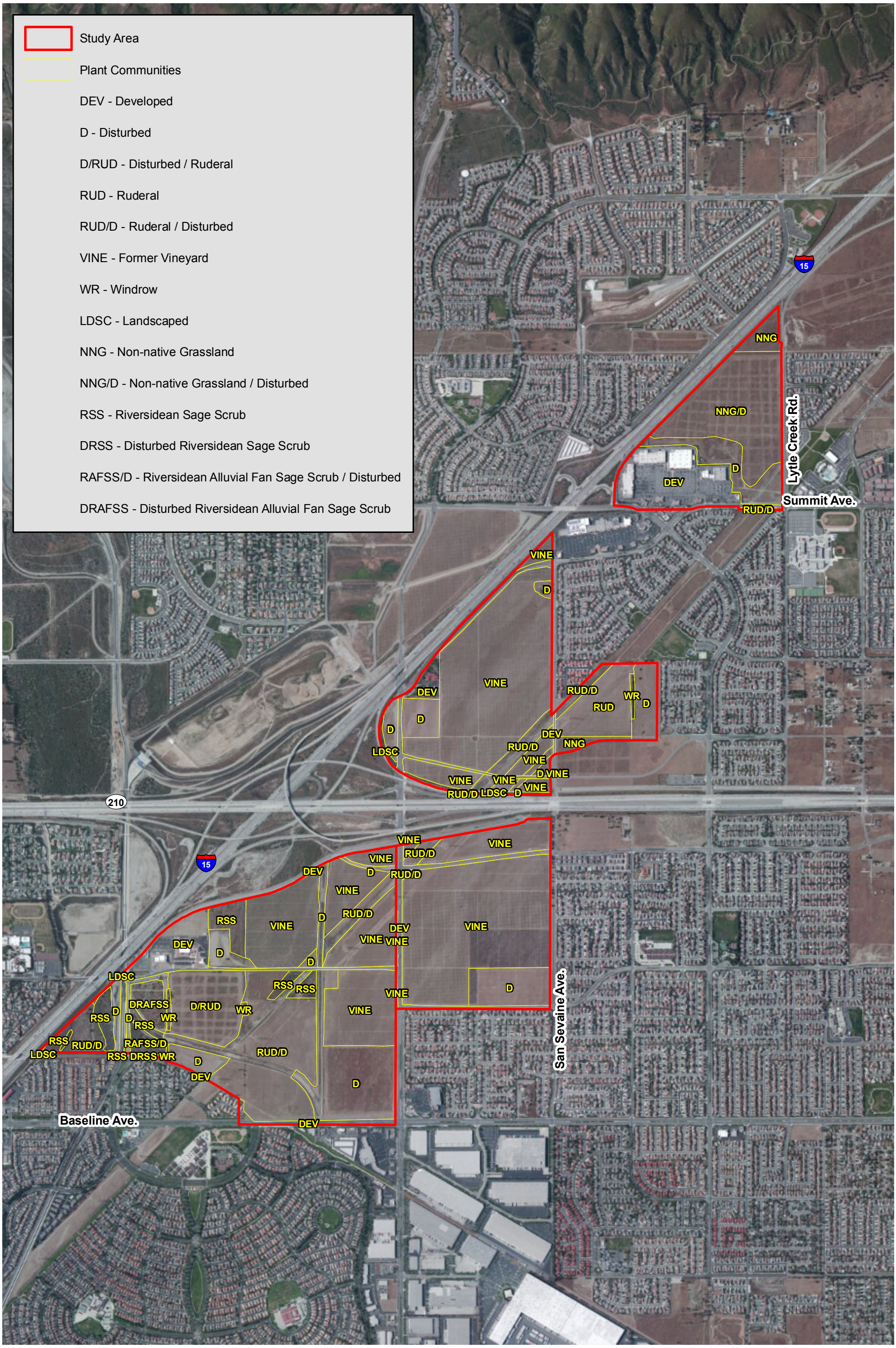
Critical Habitat

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2012.

FIGURE

4.D-2



P C R

N

1,500 0 1,500 Feet

Plant Communities

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2014.

FIGURE

4.D-3

This page is intentionally blank.

(a) Developed (Holland Code: 12000)

Developed areas were unvegetated and consisted of structures and paved roads encompassing approximately 110.38 acres. Structures included those associated with the following existing developments: Falcon Ridge Town Center and residential housing in the Falcon Ridge Village portion of the study area, a church and residential housing in the Westgate Center of the study area, residential housing in the Westgate Village East portion of the study area, and the Caltrans Transportation Management Facility and Southern Regional Lab and residential housing in the Westgate Village portion of the study area.

(b) Disturbed (Holland Code: 11300)

Disturbed areas were one of the following: barren and completely lacking vegetation, or supported scattered, stumps and/or newer growth of primarily ruderal species (see *Ruderal* below), and/or displayed signs of recent soil disturbance. Disturbed areas within the study area consisted of dirt roads compacted by vehicular use, or recently disced or graded areas with various degrees of vegetation regrowth. Disturbed areas were observed in all four portions of the study area encompassing approximately 150.12 acres.

(c) Disturbed/Ruderal (Holland Codes: 11300/10000)

The Disturbed/Ruderal within the study area were characterized by an area with a mix of primarily unvegetated areas or more recently disturbed areas as described above, in addition to areas dominated by ruderal species, as described below. The Disturbed/Ruderal area was observed in the Westgate Village portion of the study area encompassing approximately 34.13 acres. Although this area did not show signs of recent maintenance, it appeared to be subject to long-term maintenance. As such, the classification could revert to a Disturbed area following maintenance, or if left unmaintained for a longer period of time could revert to a Ruderal area.

(d) Ruderal (Holland Code: 10000)

The ruderal area was dominated by species that are characteristic of areas that have been routinely disturbed over a long period of time, including primarily non-native species in addition to some native species. Typical ruderal species observed included short pod mustard (*Hirschfeldia incana*), slender wild oat (*Avena barbata*), brome grasses (*Bromus* spp.), rattail fescue (*Vulpia myuros*), red stemmed filaree (*Erodium circutarium*), yellow star thistle (*Centaurea solstitialis*), common sunflower (*Helianthus annuus*), horehound (*Marrubium vulgare*), pigweed (*Chenopodium album*), horseweed (*Conyza canadensis*), Spanish clover (*Lotus purshianus*), false jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), fiddleneck (*Amsinckia menziesii*). This area was observed in the Westgate Center portion of the study area encompassing approximately 25.87 acres. Ruderal areas were distinguished from Disturbed areas based on whether recent versus more long-term signs of maintenance or other disturbances were observed.

(e) Ruderal/Disturbed (Holland Codes: 10000/11300)

The Ruderal/Disturbed areas within the study area were characterized by predominately ruderal species and disturbed areas, as described above. Ruderal/Disturbed areas were observed in all four portions of the study area encompassing approximately 114.24 acres, of which the majority was in the Westgate Village portion. Since this area appeared to be subject to periodic long-term maintenance, the classification could revert to a Disturbed area if disturbed in the future, or if left unmaintained for a longer time period could revert to a Ruderal area.

(f) Former Vineyard (Holland Code: 18100)

The former grape vineyards were observed in three of the four portions of the study area, including Westgate Center, Westgate Village East, and Westgate Village, encompassing approximately 406.99 acres.

(g) Windrow

Windrows were characterized as rows of planted ornamental trees and were observed in two of the four portions of the study area, encompassing approximately 3.47 acres. One windrow was observed in Westgate Center and consisted of olive trees (*Olea europaea*), and two windrows were observed in Westgate Village and consisted of eucalyptus trees (*Eucalyptus* sp.).

(h) Landscaped

Landscaped areas were observed along the I-15 freeway and consisted of planted areas primarily comprised of native vegetation typical of Riversidean Sage Scrub plant communities (see discussion below), such as California buckwheat (*Eriogonum fasciculatum*), encompassing approximately 4.78 acres.

(i) Non-Native Grassland (Holland Code: 42200)

The non-native grassland areas were dominated by non-native annual grasses such as ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), slender wild oat, and shortpod mustard. Ruderal species were also observed such as storksbill filaree and telegraph weed, in addition to a few scattered native species including California buckwheat and deerweed (*Lotus scoparius*). Non-native grassland was observed within the Falcon Ridge Village and Westgate Center portions of the study area, encompassing approximately 11.78 acres.

(j) Non-Native Grassland/Disturbed (Holland Codes: 42200/11300)

The non-native grassland areas were dominated by the non-native annual grasses in addition to other ruderal and native species, as described above. Non-native grassland was observed within the Falcon Ridge Village, encompassing approximately 63.70 acres. The area had recently been disced in a grid pattern, resulting in rectangular patches of non-native grassland separated by the disced areas.

(k) Riversidean Sage Scrub (Holland Code: 32710)

Riversidean sage scrub (RSS) is the driest, most inland expression of the collection of sage scrub or coastal scrub series and ranges throughout southern California. It typically occurs on steep slopes, severely drained soils, or clays that release soil moisture slowly. Typical stands of this type of sage scrub are fairly open and dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and foxtail chess (*Bromus madritensis* ssp. *rubens*). Additional species characteristic of this plant community include deerweed (*Lotus scoparius*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), our Lord's candle (*Yucca whipplei*), matchweed (*Gutierrezia californica*), and bushmallow (*Malacothamnus fasciculatus*).

The RSS areas within the study area were primarily dominated by California buckwheat in addition to other species such as California sagebrush, deerweed, white sage, wishbone bush (*Mirabilis californica*), showy penstemon (*Penstemon spectabilis*), and an understory of ruderal species including doveweed (*Eremocarpus setigerus*), shortpod mustard, Spanish clover, and telegraph weed. RSS was observed in the Westgate Village

portion of the study area in remnant patches within or adjacent to historic channels, and adjacent to the I-15 freeway, encompassing 23.62 acres.

(l) Disturbed Riversidean Sage Scrub

The plant species observed in the disturbed RSS areas were comparable to the RSS areas, with the exception that the disturbed RSS was characterized by a higher density of ruderal species and a lower density of native species due to disturbance. One small area of disturbed RSS was observed in the Westgate Village portion of the study area adjacent to a pathway, encompassing 0.46 acres.

(m) Riversidean Alluvial Fan Sage Scrub/Disturbed (Holland Codes: 32720/11300)

Alluvial fan sage scrub is a plant community that grows on sandy, rock alluvia deposited by streams that experience infrequent episodes of severe overbank flooding. This vegetation dominates major outwash fans at the mouths of canyons along the coastal side of the Transverse and Peninsular Ranges of southern California. Alluvial scrub is composed of an assortment of drought-deciduous subshrubs and large evergreen wood shrubs that are adapted to porous, low-fertility substrates and to survival of intense, periodic flooding and erosion. Early classification work on this plant community commonly recognized three types or phases of alluvial scrub related to such factors as the scouring action of flood channels, distance from the flood channel, time since the last catastrophic flood, and substrate features such as texture and moisture content (Smith, 1980; Hanes *et al.*, 1989). These three types are commonly referred to as: 1) pioneer – where vegetation is sparse, with a low species' diversity and stature and is found within active stream channels or recently scoured streambeds; 2) intermediate – where vegetation is rather dense and is composed mainly of subshrubs; and 3) mature – where vegetation is composed of fully developed subshrubs and wood shrubs. According to the earlier studies, however, when areas supporting alluvial fan sage scrub are permanently precluded from experiencing flooding, such as in the case of areas "downstream" of flood control improvements or protected by flood control structures, they commonly develop into an upland, often dominated by chaparral where they remain as a climax community. Conversely, episodic floods can eliminate existing stands of intermediate or mature alluvial scrub and thus initiate new pioneer stands. In a study of the floristic composition and diversity of alluvial sage scrub vegetation in San Diego County, Smith (1996) generally supports this successional concept by stating that "shrubs and sub-shrub overstories are reduced only in large-scale catastrophic floods", as is the generalized successional scenario put forth by Smith (1980) and Hanes *et al*. (1989).

According to even more recent scientific studies and literature on alluvial scrub in southern California, the processes described above may be generalizations that do not apply in all cases. Specifically, Barbour and Wirka (1997) suggest: 1) the three-phase classification of alluvial scrub may oversimplify succession throughout this community; 2) the true timeframe over which succession occurs may be longer than previously thought; and 3) the specific dynamics of succession may differ by drainage and geography.

In any case, the alluvial scrub community is distinguished by its vegetative composition, which according to the body of research available and referenced herein contrasts in several respects with that of the Riversidean and coastal sage scrub community, the plant association that characterizes most of the coastal plains and slopes of southern California. These contrasts are: (1) greater numbers of alluvial scrub species are mesic (adapted to moist habitats), whereas most coastal sage scrub species are xeric (adapted to dry habitats); (2) coastal sage scrub vegetation is composed primarily of drought-deciduous shrubs and sparse evergreens, while alluvial scrub vegetation consists of numerous evergreen shrubs and a diverse assemblage

of subshrubs; (3) scale-broom (*Lepidospartum squamatum*), a plant with high fidelity to alluvial substrates, is found throughout alluvial scrub plant communities but seldom in coastal sage scrub vegetation; (4) species commonly found in chaparral or xeric plant assemblages, such as spiny redberry (*Rhamnus crocea*) and California juniper (*Juniperus californica*), are also common in the alluvial scrub community; (5) lemonadeberry (*Rhus integrifolia*) is usually sparse in coastal sage scrub communities but occurs frequently in alluvial scrub vegetation; and (6) alluvial scrub vegetation exhibits a greater species diversity than coastal sage scrub vegetation (Hanes *et al.*, 1989).

As a vegetation type or plant community, alluvial scrub has been classified more specifically by the CNDDB as Riversidean alluvial fan sage scrub and is considered rare and worthy of consideration according to the *List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database* (CDFW 2003). Earlier work by Kirkpatrick and Hutchinson (1977) has classified the California coastal sage scrub community as Riversidean, Venturan, and San Diegan based upon floristic characteristics and this distinction has been applied to alluvial scrub as well. According to Sawyer and Keeler-Wolfe's *A Manual of California Vegetation* (1995), Riversidean alluvial fan sage scrub is categorized within the scale-broom series. The new *Terrestrial Vegetation of California* (Barbour *et al.*, 2007) acknowledges this previous classification but describes the difficulty in assigning series (now termed alliances) to communities that experience successional transitions. Barbour *et al.* (2007) defines alluvial scrub as a specific type of interior sage scrub or Riversidean sage scrub that occurs on alluvial fans and floodplains. This new classification defers to the current scientific literature on this community, including Barbour and Wirka (1997) for Los Angeles, Riverside, and San Bernardino Counties and Smith (1996) for San Diego County, for more detailed descriptions and groupings.

Despite the likelihood that studies on the most appropriate way of classifying floristic variations in alluvial scrub will continue, this plant community as a whole remains distinct and unique due to its dependency upon active fluvial processes which influence its functions and values as a habitat. Therefore, for the purposes of this biological resources assessment, the alluvial scrub that occurs within the study area will be referred to as Riversidean alluvial fan sage scrub (to date, the most widely used terminology). Furthermore, because this CEQA assessment focuses on the subjects of existing plant communities, wildlife populations, and sensitive biological resources, it remained appropriate to divide the alluvial fan sage scrub into the three phases due to the distinctions in relative age, topography, and vegetation present within the study area and the varying habitat functions and values these phases represent.

The Riversidean Alluvial Fan Sage Scrub (RAFSS) within the study area was comprised of species observed within the RSS, including California buckwheat, California sagebush, wishbone bush, deerweed, white sage, and showy penstemon, in addition to other species including Mexican elderberry (*Sambucus mexicana*), coyote bush (*Baccharis pilularis*), yerba santa (*Eriodictyon trichocalyx*), prickly pear cactus (*Opuntia littoralis*), spiny redberry (*Rhamnus crocea*), holly-leafed cherry (*Prunus ilicifolia*), skunkbrush (*Rhus trilobata*), and scale-broom (*Lepidospartum squamatum*). The RAFSS has areas of disturbance throughout consisting primarily of dirt trails that are bare or sparsely vegetated with ruderal species. The RAFSS was observed in one area within the Westgate Village portion of the study area only, associated with a remnant channel system and adjacent to an established trail, encompassing 5.23 acres. The natural channel system in this area has been replaced by an open concrete box channel from which the RAFSS is isolated, thereby removing the active fluvial processes typical for this plant community. As such, although the habitat consists of subshrubs and woody shrubs that are typical of mature RAFSS, the habitat is either likely to develop into

more of an upland chaparral dominated community based on the absence of flooding events, or become more disturbed due to the current level of human activity in the area.

(n) Disturbed Riversidean Alluvial Fan Sage Scrub

The disturbed RAFSS within the study area was comprised of remnant stands of native vegetation including scale broom, holly-leafed cherry, California buckwheat, and Mexican elderberry, with a high density of ruderal species dominated by shortpod mustard and brome grasses. This plant community was observed in one area of the Westgate Village portion of the study area only, adjacent to a remnant channel system just north of the RAFSS described above, encompassing 9.22 acres.

(2) General Plant Inventory

The plant communities discussed above are composed of numerous plant species. Observations regarding the plant species present were made during the field visit to the study area, and a list of all plant species observed is provided in Appendix A, *Floral and Faunal Compendium*, in the project's BRA (Appendix C of this Draft EIR). Sensitive plant species occurring or potentially occurring within the study area are discussed below.

(3) General Wildlife Inventory

The plant communities discussed above provide habitat for common wildlife species, including the following that were observed: western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferus*), desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), and California ground squirrel (*Spermophilus beecheyi*). Both non-native habitats, such as non-native grassland and ruderal areas, in addition to the native habitats, such as Riversidean Sage Scrub and Riversidean Alluvial Fan Sage Scrub, can provide habitat for these species. Observations regarding the wildlife species present were made during the field visit to the study area, and a list of all species observed is provided in Appendix A, *Floral and Faunal Compendium*, of the project BRA (Appendix C to this Draft EIR). The larger Dulzura kangaroo rat (*Dipodomys simulans*) was observed by Dr. O'Farrell during the SBKR assessment over much of the study area, although numbers appeared to be small consistent with the degradation of the habitat (O'Farrell Biological Consulting, 2012. The assessment memo is also provided as Appendix D, *San Bernardino Kangaroo Rat Assessment*). Since this species is not protected by any regulations, it is not considered sensitive. Sensitive wildlife species occurring or potentially occurring are discussed below.

(4) Wildlife Movement

(a) Overview

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because

they prohibit the infusion of new individuals and genetic material (MacArthur and Wilson, 1967; Soulé, 1987; Harris and Gallagher, 1989; Bennet, 1990).

Corridors effectively act as links between different populations of a species. A group of smaller populations (termed "demes") linked together via a system of corridors is termed a "metapopulation." The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population's genetic variability is generally associated with an increase in a population's health and long-term viability.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss, 1983; Fahrig and Merriam, 1985; Simberloff and Cox, 1987; Harris and Gallagher, 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and, (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor," "travel route," and "wildlife crossing" to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den areas). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels

to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often "choke points" along a movement corridor.

(b) Wildlife Movement Within the Study area

As previously described, wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of each of these types of movement is species specific, large open spaces will generally support a diverse wildlife community representing all types of movement. Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a "local" level to home ranges encompassing many square-miles for large mammals moving on a "regional" level.

Regional movement through the study area to the surrounding vicinity immediately adjacent to the study area is restricted in all directions due to the surrounding development and the I-15 freeway. The study area is situated approximately 0.75 mile southeast of the foothills of the San Gabriel Mountains, approximately 2.6 miles southwest of Lytle Creek Wash, and approximately 5.0 miles southwest of Cajon Wash. The study area is immediately adjacent to the San Sevaine Flood Control Basin which is located to the west, and a portion of Etiwanda San Sevaine Flood Control Channel runs along the study area boundary in the southwestern portion. These two resources may provide important water sources to wildlife in the study area vicinity, in addition to other basin features to the northwest of the study area.

Due to the past urbanization of the region, the study area is immediately surrounded by the I-15 freeway and residential development to the north, and residential development with patches of vacant land to the east, south and west. Development in the area would deter the movement of larger mammals that require larger home range areas and dispersal distances or dense vegetative cover. Species that are less restricted in movement pathway requirements or are adapted to urban areas (e.g., raccoon, skunk, coyote, birds) likely move through the study area. However, the study area does not support habitat that connects two or more habitat patches that would otherwise be fragmented or isolated from one another; thus, the study area is not considered a wildlife corridor. Additionally, the South Coast Missing Linkage Project: A Linkage Design for the San Gabriel-San Bernardino Connection was reviewed (Penrod *et al.*, 2004). Although the study area is immediately adjacent to the San Gabriel-San Bernardino Connection to the south (less than approximately 0.25 mile), as identified by South Coast Missing Linkage Project, it is not within any wildlife corridors. A small portion of the northernmost boundary of the study area is located within the *North Fontana Interim MSHCP Policy* boundary. However, no known corridors or linkages are identified in the plan within the study area, based on the 2004 City of Fontana *North Fontana Interim MSHCP Policy* document.

Movement on a smaller or "local" scale could occur within the study area. Portions of the study area were previously utilized for agricultural purposes, and former vineyards currently exist within the study area (excluding the Falcon Ridge Village portion). Limited habitat within the study area therefore consists of primarily ruderal and non-native grassland, with remnant patches of RSS and RAFSS. A portion of Etiwanda San Sevaine Flood Control Channel runs along the study area boundary in the southwestern portion (northern boundary of Westgate Village), which consists of a concrete-lined channel, located both on- and off-site (refer to **Figure 4.D-4**, *Jurisdictional Features*, below). Two remnant non-jurisdictional channels that no longer provide an upstream or downstream connection are also present within the Westgate Village portion of the study area; these features are likely historic from prior to construction of the Etiwanda San

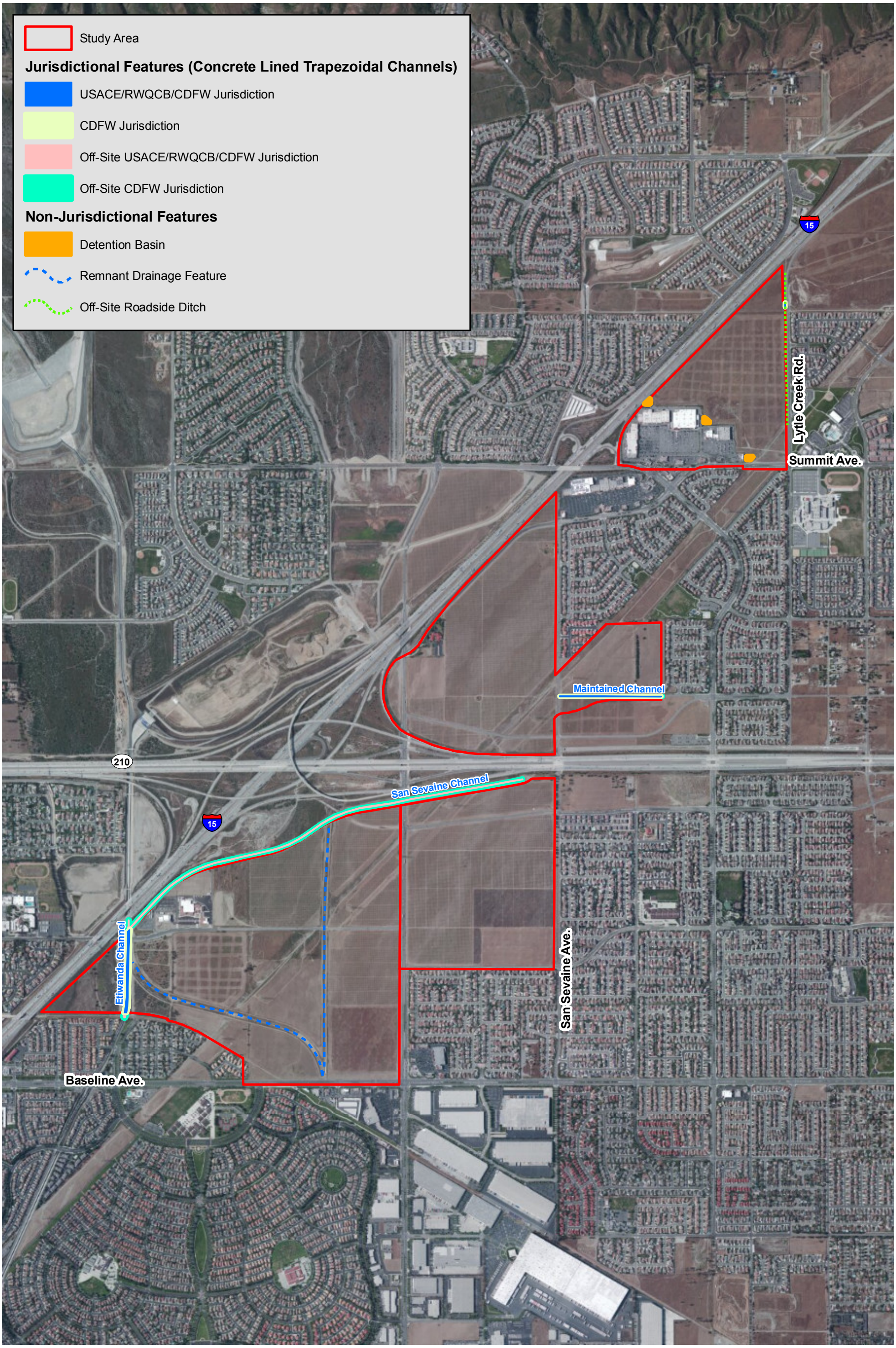
Sevaine Flood Control Channel. Native vegetation in these features is limited to the northern segments and consists of RSS and Disturbed RSS; the southern segments are vegetated with Ruderal species. Other channel features on-site consist of one concrete ditch located in the Westgate Center portion of the study area and a roadside dirt ditch in the Falcon Ridge Village portion. These features are only a few feet wide and do not support habitat. Based on the lack of habitat and off-site connection, these features are not expected to support wildlife movement on a regional scale. Although the habitat on-site is disturbed and/or remnant, it likely supports some wildlife movement within the study area for foraging. Data gathered from the biological survey indicates that the study area contains habitat that supports common species of invertebrates, reptiles, birds, and mammals. The home range and average dispersal distance of many of these species may be entirely contained within the study area and immediate vicinity. Populations of animals such as insects, reptiles, small mammals, and a few bird species may find all their resource requirements without moving far or outside of the study area at all. Occasionally, individuals expanding their home range or dispersing from their parental range will attempt to move outside of the study area, if feasible based on the surrounding restrictions to movement from development (see above). Bird species may fly over the development and I-15 freeway and utilize the study area for foraging, although this is expected to be limited due to the high level of human activity in the region. Birds are more likely to use the water basins off-site on the north side of the I-15 freeway, including the San Sevaine Flood Control Basin.

Although the study area supports live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor.

(5) Jurisdictional Waters and Wetlands

The potential for USACE, RWQCB, and/or CDFW jurisdictional waters associated with the project study area was assessed based primarily on the presence or absence of jurisdictional field indicators such as an ordinary high water mark (OHWM) and defined bed-and-bank given the concrete nature of the jurisdictional features examined (i.e. secondary indicators of hydrology such as erosion, the deposition of debris, scour, sediment sorting, and changes in vegetation did not apply). If these criteria were met, data was collected to estimate the channel width of jurisdictional waters potentially regulated by the resource agencies. Downstream surface connections to known USACE jurisdictional waters were also evaluated using satellite imagery and mapping, for the purpose of establishing "waters of the U.S." Although this BRA provides a specific-plan level jurisdictional assessment of existing field conditions, concurrence by the resource agencies will likely be sought during regulatory approvals for future projects within the proposed specific-plan areas. Therefore, this jurisdictional assessment should provide a basis for future concurrence by the resource agencies, where appropriate. The study area supports three (3) jurisdictional drainage features comprised of concrete channels that appear to meet the definition of jurisdictional waters (refer to Figure 4.D-4 above).

Jurisdictional concrete-lined channels associated with the Westgate Specific Plan study area total approximately 2.77 acres of USACE/RWQCB "waters of the U.S." and 5.04 acres of CDFW jurisdiction. **Table 4.D-2**, *Jurisdictional Features*, and associated drainage descriptions below provide a summary of jurisdictional drainage features assessed as part of the project study area.



PCR

N

1,500 0 1,500 Feet

Jurisdictional Features

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2014.

FIGURE

4.D-4

This page is intentionally blank.

Table 4.D-2

Jurisdictional Features[a]

Concrete Channels	Length (feet)	Area (acres) USACE/ RWQCB	Area (acres) CDFW	Flow Type
Maintained Channel	1,736	0.12	0.40	Ephemeral
San Sevaine channel (Off-Site)	7,395	1.69	2.71	Intermittent
Etiwanda Channel	1,401	0.96	1.93	Intermittent
Total	**10,532**	**2.77**	**5.04**	

Jurisdictional acreages overlap and are not additive (e.g., USACE acreages are included in the total RWQCB and CDFW jurisdictional acreages).

PCR Services Corporation, 2012 and 2014.

(a) Maintained Channel

A concrete trapezoidal channel is located within the Westgate Center portion of the study area that commences at a culvert located near the southeasternmost corner of the Westgate Center boundary, and extends from the terminus of Sierra Lakes Parkway located approximately 800 feet west of its intersection with Beech Avenue. The maintained channel accepts flows from a stormdrain beneath Sierra Lakes Highway via an open concrete-lined trapezoidal channel that extends to the west for approximately 1,736 linear feet before discharging flow into a stand-pipe inlet that appears to drain to the feature identified in this BRA as the "San Sevaine Channel" approximately 0.20 miles south of the inlet. Given that the San Sevaine channel supports USACE jurisdictional field indicators such as an ordinary high water mark (OHWM), and appears to support flow exceeding three months in duration a year, the San Sevaine channel is likely to be considered a Relatively Permanent Water (RPW) regulated by the USACE. Therefore, the maintained channel is a tributary to an RPW, is regulated by the USACE and is thus considered jurisdictional "waters of the U.S." for the purpose of this specific-plan level BRA.

The maintained channel is unvegetated and is presumed to be subject to regular flood control maintenance. USACE jurisdictional channel widths ranged from 3-14 feet while CDFW jurisdictional channel widths ranged from 10-14 feet.

Jurisdiction associated with the maintained channel totals approximately 0.12 acre of USACE/RWQCB "waters of the U.S." and 0.40 acre of CDFW streambed.

(b) San Sevaine Channel (Off-Site)

A concrete trapezoidal channel occurs directly off-site adjacent to the northern boundary of the Westgate Village and Westgate Village East portions of the study area. The channel commences from a culvert beneath the 210 freeway near the northeast boundary of the Westgate Village East portion of the study area, and extends toward the west/southwest for approximately 7,395 linear feet prior to joining the Etiwanda Creek Channel near the 15 freeway. The channel is identified as the San Sevaine Channel for the purpose of this assessment as it diverts flow that historically entered the earthen/remnant extent of San Sevaine Creek that

remains on the Westgate Village portion of the project study area (see "Remnant East Etiwanda & San Sevaine Creek" description below). However, based on U.S. Geographical Survey topographic mapping and historic aerial imagery, it appears that all San Sevaine Creek flows were diverted into the Etiwanda Creek channel in the late 1990s. Therefore it should be noted that the San Sevaine channel assessed by this BRA does not appear to carry any flow from San Sevaine Creek and is not within the historical downstream location of that creek, but serves to accept flow from developed areas north of the 210 freeway. Jurisdictional channel widths averaged approximately 10 feet for USACE/RWQCB and 16 feet for CDFW.

The off-site San Sevaine channel supports approximately 1.69 acres of USACE/RWQCB concrete-lined jurisdictional "waters of the U.S." and 2.71 acres of CDFW jurisdiction.

(c) Etiwanda Channel

Etiwanda Channel is a concrete box channel located near the southwest tip of the Westgate Village portion of the study area that extends directly south from beneath the 15 freeway for approximately 1,401 linear feet prior to exiting the study area. Etiwanda Channel accepts storm flow from foothills located approximately 3 miles north of the study area associated with East Etiwanda and San Sevaine Canyons, through a series of basins and diversion structures. The channel also accepts flow from the off-site jurisdictional drainage feature identified as San Sevaine channel. Based on review of historic aerial imagery, it appears that East Etiwanda Creek was channelized in its current configuration in the 1980's. An earthen, non-jurisdictional remnant portion of the historic configuration of the Etiwanda Channel occurs on the Westgate Village study area as described under "Remnant Etiwanda Creek" below. However, all flows are confined to the concrete extent of the jurisdictional Etiwanda Channel as no hydraulic connection to the remnant portion of the creek exists. Jurisdictional channel widths ranged from 6-30 feet for USACE/RWQCB and 20-60 feet for CDFW.

The Etiwanda Channel supports approximately 0.96 acre of USACE/RWQCB concrete-lined jurisdictional "waters of the U.S." and 1.93 acres of CDFW jurisdiction.

(6) Non-Jurisdictional Drainage Features

The following provides a summary of non-jurisdictional drainage features observed in association with the project study areas. Concurrence regarding the lack of jurisdiction should be obtained from the resource agencies on a project-by-project basis during future regulatory approvals within the proposed Westgate Specific Plan area. As depicted above in Figure 4.D-4, six drainage features do not appear to meet the definition of jurisdictional waters including one (1) off-site roadside ditch, four (4) man-made detention basins, and two (2) remnant channels associated with the historic extents of East Etiwanda Creek and San Sevaine Creek that do not appear to meet the definition of USACE, RWQCB, and/or CDFW jurisdictional resources.

(a) Detention Basins

Three man-made detention basins are located on the Falcon Ridge Village portion of the study area directly behind an existing commercial retail development constructed in 2006/2007 based on satellite imagery. The basins support disturbed vegetation likely subject to regular maintenance. No USACE/RWQCB jurisdictional field indicators such as an OHWM or defined bed-and-bank were observed within the detention basins. Therefore, the basins were determined not to support resource agency jurisdiction.

(b) Roadside Ditch (Off-Site)

A roadside ditch occurs directly off-site along the majority of the eastern boundary of the Falcon Ridge Village portion of the study area. The ditch runs along the western shoulder of Lytle Creek Road and appears to be regularly maintained. The ditch is comprised primarily of earthen gullies that discharge into a series of stand-pipes located approximately every 200-300 linear feet along Lytle Creek Road. The ditch is characterized as an earthen gully with scattered ruderal vegetation. In several areas, the ditch supports little evidence of flow and is not discernable as a drainage feature. The roadside feature appears to be consistent with the USACE definition of non-regulated features based on the legal memorandum jointly issued by the USACE and Environmental Protection Agency on June 5, 2007 which defines such ditches as, "…*ditches (including roadside ditches) excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water*." Given the above observations and the lack of a discernable streambed and/or defined bed-and-bank, the roadside ditch was determined not to support resource agency jurisdiction.

(c) Remnant East Etiwanda & San Sevaine Creeks

A remnant portion of the historically channelized extent of East Etiwanda and San Sevaine Creeks occur on the Westgate Village portion of the study area. Both remnant drainages have been hydraulically severed from upstream creek flow, based on the complete diversion of flow created by the concrete channelization of the jurisdictional components of the Etiwanda Channel and the San Sevaine channel described above. As depicted in Figure 4.D-3, both features support upland vegetation communities including RSS, disturbed RSS, ruderal/disturbed, and disturbed. In addition, no jurisdictional field indicators where observed within the remnant drainages. Therefore, the remnant extents of East Etiwanda Creek and San Sevaine Creek were determined not to support resource agency jurisdiction.

(7) Sensitive Biological Resources

The following discussion describes the plant and wildlife species present, or potentially present, within the study area that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species have declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by either Federal or State resource management agencies, or both, as threatened or endangered, under provisions of the Federal and State Endangered Species Acts (FESA and CESA, respectively).

(a) Sensitive Resource Classification

(i) Federal Protection and Classifications

The FESA of 1973 defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species.

All references to Federally-protected species in this report include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment the following acronyms are used for Federal status species, as applicable:

- FE Federally-listed as Endangered
- FT Federally-listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FPD Federally proposed for delisting
- FC Federal candidate species (former C1 species)

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, Federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist.

(ii) State of California Protection and Classifications

California's Endangered Species Act (CESA) defines an endangered species as:

> "…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

The State defines a threatened species as:

> "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

Candidate species are defined as:

> "…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list."

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

> "no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided."

Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

For the purposes of this assessment, the following acronyms are used for State status species, as applicable:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened
- SFP State Fully Protected
- SSC California Species of Special Concern

(iii) California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2001). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, of which Lists 1A, 1B, and 2 are particularly considered sensitive:

- List 1A Presumed extinct in California.

- List 1B Plants Rare, Threatened, or Endangered in California and elsewhere.
- List 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- List 3 Plants about which we need more information – a review list.
- List 4 Plants of limited distribution – a watch list.

The CNPS recently added "threat ranks" which parallel the ranks used by the CNDDB. These ranks are added as a decimal code after the CNPS List (e.g., List 1B.1). The threat codes are as follows:

- .1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- .2 – Fairly endangered in California (20-80% occurrences threatened);
- .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known).

Sensitive species that occur or potentially could occur within the study area are based on one or more of the following: (1) the direct observation of the species within the study area during any field surveys; (2) a record reported in the CNDDB; and (3) the study area is within known distribution of a species and contains appropriate habitat.

(iv) North Fontana MSHCP

A portion of the Westgate Specific Plan study area (7.69 acres) is located within the proposed North Fontana MSHCP Plan Area boundary. The City of Fontana has prepared and submitted an MSHCP to address impacts and mitigation for listed and sensitive species found within the Plan Area. While the MSHCP is being processed, the City of Fontana has issued the *North Fontana Interim MSHCP Policy* that is in keeping with the intent and direction of the upcoming MSHCP. The policy was established to assess and develop mitigation measures for all development applications within the designated Plan Area.

(b) Sensitive Plant Communities/Habitat

Due to its ability to support listed plant and wildlife species, RSS and RAFSS are considered sensitive habitats by wildlife agencies such as CDFW and USFWS, and as also identified in the *North Fontana Interim MSHCP Policy*. As summarized above in Table 4.D-1, the study area supports 25.3 acres of RSS, 3.11 acres of Disturbed RSS, 5.23 acres of RAFSS/Disturbed and 9.22 acres of Disturbed RAFSS. These areas are all within the Westgate Village portion of the study area and are disturbed remnant patches of habitat surrounded by development. Therefore, due to their disturbed and isolated nature, the value of these areas for plant and wildlife species is expected to be low.

(c) Sensitive Plant Species

Sensitive plants include those listed, or candidates for listing, by the USFWS and CDFW, and species considered sensitive by the CNPS (particularly Lists 1A, 1B, and 2). Several sensitive plant species were reported in the vicinity based on CNDDB, the 2004 *North Fontana Interim MSHCP Policy*, and the *Final EIR* (City of Fontana, 1996). A total of 13 species were identified as having a potential to occur within the study area based on the literature review and habitat anticipated within the study area, as listed in Appendix B.

Following the field survey, 10 of the species were identified as having a low potential to occur within the RSS and RAFSS habitats due to the disturbance and remnant nature of these areas. Although the species are not anticipated to occur, focused surveys would be required to confirm absence based on a low potential for these species to occur. The remaining three species were determined as having no potential to occur. For two species, this was determined due to the absence of suitable habitat within the study area, namely slender-horned spineflower (*Dodecahema leptoceras*) and Santa Ana River woollystar (*Eriastrum densifolium* ssp*. sanctorum*). For the remaining species, Nevin's barberry (*Berberis nevinii*), this was based on the lack of any known occurrences (USFWS, 2009), limited/poor quality, and the lack of any observations during the field survey (this species is evergreen and therefore should be visible year-round). The sensitive plant species reviewed, as well as their potential to occur on-site, are detailed in Appendix B of the project's BRA (Appendix C of this Draft EIR).

(d) Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and species of special concern to the CDFW. Several sensitive wildlife species were reported in the vicinity based on CNDDB, the 2004 *North Fontana Interim MSHCP Policy*, and the *Final EIR* (City of Fontana, 1996). A total of 43 species were identified as having a potential to occur within the study area based on the literature review and habitat anticipated within the study area, as listed in Appendix C of the project's BRA (Appendix C of this Draft EIR). Following the field survey, 17 species were determined as having no potential due to the lack of suitable habitat in the study area. Of the remaining species, 18 species were identified as having a low potential to occur within the RSS, RAFSS and/or grassland habitats due to the limited and poor quality nature of these areas, 6 bird species were identified as having a moderate potential to occur based on the presence of suitable foraging habitat, and 2 species were identified has having a high potential to occur based on past observations within the study area. Four sensitive species, in addition to a group of species, are analyzed in more detail below due to known presence within the study area or within the vicinity. These species are listed in Appendix C and include San Bernardino kangaroo rat, coastal California gnatcatcher (*Polioptila californica californica*), burrowing owl, Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*), and raptors. The sensitive wildlife species reviewed, as well as their potential to occur on-site, are detailed in Appendix B of the project's BRA (Appendix C of this Draft EIR).

(i) San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat (SBKR) is federally endangered species and a California Species of Special Concern. As documented in the *North Fontana Interim MSHCP Policy* document, a permitted SBKR survey effort was conducted in 2002 and 2004 on the Fontana Fan. In 2002, seven SBKR were captured during a total of 4,950 trapping nights. The few isolated pockets of SBKR were distributed within RAFSS communities. No SBKR were trapped in 2004 during a total of 2,700 trapping nights. Habitat within the study area includes critical habitat mapped within the Falcon Ridge Village portion, and two small areas of RAFSS in the southwestern portion of Westgate Village (5.23 acres of RAFSS/Disturbed and 9.22 acres of Disturbed RAFSS). The area mapped as critical habitat consists of Developed, Disturbed, and Non-native Grassland that does not support any alluvial scrub vegetation, alluvial fans or flood plain systems. The RAFSS in the southwestern portion of the study area are disturbed and hydrologically isolated from the San Sevaine Flood Control Channel. They are located immediately adjacent to a remnant drainage channel. As discussed above, the natural channel system in these areas have been replaced by an open concrete box channel from which the RAFSS is isolated, thereby removing the active fluvial processes typical for this plant

community. As such, although the habitat consists of subshrubs and woody shrubs that are typical of mature RAFSS, the habitat is either likely to develop into more of an upland chaparral dominated community based on the absence of flooding events, or become more disturbed due to the current level of human activity in the area. A high level of disturbance and ruderal species is present in these areas, including dense areas of brome grasses. Habitat within the remnant channel area is characteristic of RSS and does not support a dominance of species typical of RAFSS habitat. Based on the lack of suitable habitat and limited occurrences in the study area vicinity, SBKR is not expected to occur within the study area. Dr. Michael O'Farrell conducted a site assessment for SBKR and prepared a memo of findings, provided as Appendix D. As outlined in the memo, no diagnostic sign or residents of SBKR were found on or adjacent to the study area, and habitat present on-site excludes the potential for occupation by SBKR, including the continual disking of the majority of the study area, and densely vegetated areas (O'Farrell Biological Consulting, 2012). The study area is also surrounded by heavy development that prevents the possibility of this species recolonizing from off-site. Therefore, Dr. O'Farrell concluded that the Westgate Specific Plan would not result in take of SBKR.

(ii) Coastal California Gnatcatcher

The coastal California gnatcatcher (CAGN) is federally threatened species and a California Species of Special Concern. As documented in the 2004 *North Fontana Interim MSHCP Policy* document, the Fontana Fan between Sierra and Citrus Avenues north of Summit Avenue to the I-15 freeway were surveyed in 2002 and 2004. The species was not observed or heard within the MSHCP Plan Area, although habitat was documented as present. CNDDB and USFWS occurrences of this species are documented as the base of the San Gabriel Mountains approximately two miles northwest of the study area. Also, as discussed above, the RSS within the study area is limited and of poor habitat quality. Based on the presence of CAGN within 2 miles of the study area, and the limited/poor quality of the habitat, this species is considered as having a low potential to occur within the study area.

(iii) Burrowing Owl

Burrowing owl is a California Species of Special Concern that was documented as occurring within the vicinity of the North Fontana Interim MSHCP. The species was not observed within the study area based on the *Final EIR* (City of Fontana, 1996). Although the study area does provide potentially suitable habitat for burrowing owl, including Ruderal and Non-native Grassland, this species is considered rare in the vicinity of the study area and, as a result, is considered to have limited potential for occurrence. The study area is also surrounded by existing development and the habitat is highly disturbed. Based on the presence of burrowing owl in the vicinity, and the limited/poor quality of the habitat, this species is considered as having a low potential to occur within the study area.

(iv) Delhi Sands Flower-Loving Fly

Delhi Sands flower-loving fly is a federally endangered species that requires Delhi Sands formations with wholly or partly consolidated dunes and sparse vegetation. The southern portion of the study area, within Westgate Village, is mapped as a Delhi Sands flower-loving fly occurrence in CNDDB. This area consists of Developed areas, in addition to Ruderal/Disturbed and Disturbed areas and is not mapped as Delhi Sands soils. Based on the absence of required soils and dune formations, Delhi Sands flower-loving fly is considered as having no potential to occur within the study area.

(v) Raptors

The study area has the potential to support foraging habitat for seven species of raptors, including a low potential for golden eagle (*Aquila chrysaetos*) based on the rarity of the species in this area, in addition to a moderate potential for white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperi*), sharp-shinned hawk (*Accipiter striatus*), ferruginous hawk (*Buteo regalis*), and American peregrine falcon (*Falco peregrinus anatum*) based on the presence of suitable habitat.

b. Regulatory Framework

Sensitive species are provided protection by either Federal or State resource management agencies, or both, under provisions of the FESA and CESA. The following provides a discussion of Federal Regulations, State of California Regulations, CNPS, and Local Regulations including the City of Fontana Tree Preservation Ordinance, the City of Fontana General Plan, and the *North Fontana Interim MSHCP Policy* (Michael Brandman Associates, 2004).

There are a number of performance criteria and standard conditions that must be met as part of any review and approval of the proposed project. These include compliance with all of the terms, provisions, and requirements with applicable laws that relate to Federal, State, and local regulating agencies related to potential impacts to sensitive plant and wildlife species, wetlands, riparian habitats, and blue lined stream courses.

(1) Federal Regulations

As previously discussed, under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to "take" any listed species. In a case where a property owner seeks permission from a Federal agency for an action which could affect a Federally-listed plant and animal species, the property owner and agency are required to consult with USFWS to obtain appropriate permits. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

The North Fontana MSHCP, once adopted, will likely provide permits for the take of all species identified in the MSHCP as covered and conditionally covered, so long as the conditions imposed are satisfied.

(a) Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged material, placement of fill material, or excavation within "waters of the U.S." and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. "Waters of the U.S." are defined by the CWA as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined by the CWA as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." The permit review process entails an assessment of potentially adverse impacts to USACE jurisdictional "waters of the U.S." and wetlands. In response to the permit application, the USACE will also require conditions amounting to mitigation measures. Where a Federally-listed species may be affected, they will also require an Endangered Species Act Section 7 consultation with the USFWS. Through this process, potentially significant adverse impacts within the Federal jurisdictional limits could be mitigated to a level that is less than significant.

Over the years, the USACE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memorandums, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how these waters of the U.S. will be regulated. The most recent significant modification occurred on June 5, 2007, subsequently updated in December 2008 when the USACE and the U.S. Environmental Protection Agency issued a series of guidance documents outlining the requirements and procedures, effective immediately, to establish jurisdiction under Section 404 of the CWA and the Section 10 of the Rivers and Harbors Act of 1899. These documents are intended to be used for all jurisdictional delineations and provide specific guidance for the jurisdictional determination of potentially jurisdictional features affected by the United States Supreme Court rulings in *Rapanos v. the United States* and *Carabell v. the United States* 547U.S. 715 (2006) (jointly referred to as "*Rapanos*").

The *Rapanos* case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-navigable, ephemeral tributaries. Under a plurality ruling, the Court noted that certain "not relatively permanent" (i.e. ephemeral), non-navigable tributaries must have a "significant nexus" to downstream traditional navigable waters to be jurisdictional. An ephemeral tributary has a significant nexus to downstream navigable "waters" when it has "more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a Traditional Navigable Water (TNW)." A significant nexus is established through the consideration of a variety of hydrologic, geologic and ecological factors specific to the particular drainage feature in question.

(b) Federal Clean Water Act, Section 401

> *The mission of the California Regional Water Quality Control Board (RWQCB) is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology, and hydrology. The California RWQCB is responsible for implementing compliance not only with State codes such as the California Water Code, but also Federal acts such as Section 401 of the CWA which requires that: Any applicant for a Federal permit for activities that involve a discharge to waters of the State shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.*

Therefore, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB. A complete application for 401 Certification will include a detailed Water Quality Management Plan that addresses the key water quality features of the project to ensure the integrity of water quality in the area during and post-construction.

Under separate authorities granted by State law (i.e., the Porter-Cologne Water Quality Control Act), a RWQCB may choose to regulate discharges of dredge or fill materials by issuing or waiving (with or without conditions) Waste Discharge Requirements (WDRs), a type of State discharge permit, instead of taking a water quality certification action. Processing of a WDR is similar to that of a Section 401 certification; however, the RWQCB has slightly more discretion to add conditions to a project under Porter-Cologne than under the Federal CWA.

(2) State of California Regulations

As previously discussed, Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species. Exceptions authorized by the State to allow "take" require permits or memoranda of understanding and can be authorized for "endangered species, threatened species, or candidate species for scientific, educational, or management purposes." Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required by an initiator prior to disturbance.

(a) State of California Fish and Game Code, Section 1602

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify the CDFW of the proposed project. In the course of this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

(3) California Native Plant Society

As previously discussed, the CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California which classifies plant species into categories of rarity. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments.

(4) Local Regulations

(a) North Fontana MSHCP

As previously discussed, the study area is within the proposed North Fontana MSHCP Plan area that is currently being processed. The City of Fontana has issued the North Fontana Interim MSHCP Policy until the MSHCP is adopted, which outlines proposed mitigation fees.

(b) City of Fontana Tree Preservation Ordinance

The City Tree Preservation Ordinance under Section 12.32.110 Subdivisions or Grading Plan states the following tree policy:

> *In the case of a subdivision, or grading plan, the grading plan shall show the location of each tree proposed to be removed. If the City approves the subdivision map, or grading permit, the Director of Community Services may, in his discretion, relieve the applicant of any necessity to apply for a separate permit for tree removal. In cases which the Director constitutes a permit to remove the trees designated on the subdivision map or grading plan subject to any conditions which the Director may attach to the issuance of the permit.*

(c) City of Fontana General Plan Goals and Policies

The City of Fontana General Plan goal and policies related to biological resources are outlined below.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) Approach Overview for Biological Resources Assessment

The following assessment of biological resources is based on information compiled through field reconnaissance and appropriate reference materials. A general biological survey and vegetation mapping was conducted, in addition to a jurisdictional waters and wetlands delineation and habitat assessments for burrowing owl and San Bernardino kangaroo rat. No focused surveys were conducted.

(2) Literature Review

This assessment of biological resources began with a review of relevant literature on the biological resources of the study area and surrounding vicinity. The California Natural Diversity Database (CNDDB), a CDFW species account database, was reviewed for all pertinent information regarding the localities of known observations of sensitive species and habitats in the vicinity of the study area (CNDDB, 2012). The vicinity of the study area included the following USGS topographic quadrangles: Mount San Antonio, Telegraph Peak, Cajon, Devore, Lake Arrowhead, Mount Baldy, Cucamonga Peak, Harrison Mountain, San Dimas, Ontario, Guasti, Fontana, San Bernardino South, Prado Dam, Riverside West, Riverside East and Sunnymead. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS, 2012a), CDFW and the California Native Plant Society (CNPS) were reviewed in conjunction with anticipated Federally and State listed species potentially occurring within the vicinity. Other data sources reviewed include USFWS critical habitat maps (USFWS, 2012b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS, 2012). In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats, in addition to relevant local policies such as the *North Fontana Interim MSHCP Policy* (Michael Brandman Associates, 2004). Documentation on previous assessments and surveys conducted on the study area was also reviewed, namely the *Final Environmental Impact Report* (EIR) for the Westgate Specific Plan (City of Fontana, 1996).

(3) Field Investigations

A general biological survey and vegetation mapping was conducted by PCR biologist Ceri Williams-Dodd on May 15, 2012 to document plant communities and existing conditions. During the course of this survey, an inventory of all plant and wildlife species observed was compiled, focusing on dominant plant species for the purposes of vegetation mapping. Survey coverage of the entire study area, with special attention to sensitive habitats or those areas potentially supporting sensitive flora or fauna, was ensured using aerial photographs. Habitat assessments for burrowing owl and San Bernardino kangaroo rat (SBKR) were also conducted. PCR environmental scientist Amir Morales also conducted a jurisdictional delineation on May 15, 2012. The vegetation mapping and jurisdictional delineation was updated for portions of the study area by PCR biologist Ezekiel Cooley on February 20, 2014. Specifically, the areas reassessed in the field included the jurisdictional features within the Westgate Center and Westgate Village portions of the study area, and the remnant drainage features within the Westgate Village portion of the study area.

(a) Plant Community Mapping

Plant communities were mapped directly in the field utilizing a 250-scale (1"=250') aerial photograph. Plant community names and descriptions follow Holland (1986) and A *California Manual of Vegetation* (Sawyer and Keeler-Wolf, 1995). After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

(b) General Plant Inventory

All plant species observed during surveys were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Common plant names, when not available from Hickman, were taken from Munz (1974) and/or Clarke (2007). Since common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. All plant species observed are included in the Appendix A, *Floral and Faunal Compendium*, in the project's BRA (included as Appendix C of this Draft EIR). Sensitive plant species are discussed below.

(c) Sensitive Plant Species

The potential for sensitive plant species was assessed based upon the known occurrence of species in the area as identified from CDFW, USFWS and CNPS databases, and the presence or absence of suitable habitat within the study area based on plant community mapping. Suitable habitat was defined as areas with appropriate vegetation communities, soils and/or topography (elevation at MSL) to support the species based on known occurrences in those habitats and/or CDFW and CNPS documented habitat descriptions for the species. The definitions of suitable habitat were then compared against the vegetation mapping conducted for the study area and local knowledge. A table of sensitive plant species for which potentially suitable habitat occurs within the study area was prepared prior to the field survey, and the potential for occurrence for each species was determined following completion of the vegetation mapping conducted during the field survey. The potential for occurrence for each species is summarized in Appendix B, *Sensitive Plant Species.* No focused surveys were conducted for sensitive plant species.

(d) General Wildlife Inventory

All wildlife species observed within the study area, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. Scientific names are used during the first mention of a species; common names only are used in the remainder of the text. A list of all wildlife species detected is included in Appendix A, *Floral and Faunal Compendium*, in the project's BRA (included as Appendix C of this Draft EIR). Sensitive wildlife species are discussed below.

(e) Sensitive Wildlife Species

The potential for sensitive wildlife species was assessed based upon the known occurrence of species in the area as identified from CDFW and USFWS databases, and the presence or absence of suitable habitat within the study area based on plant community mapping. Suitable habitat was defined as areas with appropriate vegetation communities and/or topography (elevation at MSL) to support the species based on known

occurrences in those habitats and/or CDFW and CNPS documented habitat descriptions for the species. The definitions of suitable habitat were then compared against the vegetation mapping conducted for the study area and local knowledge. A table of sensitive wildlife species for which potentially suitable habitat occurs within the study area was prepared prior to the field survey, and the potential for occurrence for each species was determined following completion of the vegetation mapping conducted during the field survey. The potential for occurrence for each species is summarized in Appendix C, *Sensitive Wildlife Species*, in the project's BRA (included as Appendix C of this Draft EIR). No focused surveys were conducted for sensitive wildlife species. A more detailed assessment of habitat was conducted for burrowing owl and San Bernardino kangaroo rat, as described below.

(f) Habitat Assessments

A more detailed assessment of habitat was conducted for burrowing owl and SBKR, two species determined as potentially occurring within the study area based on occurrences in the project vicinity. The habitat assessment field survey for burrowing owl was conducted pursuant to Appendix C of the Department of Fish and Wildlife (DFW) data collection guidelines (DFW, 2012), including identifying suitable vegetation communities, burrows, or any owl sign within the study area. For SBKR, a determination of whether suitable habitat is present or absent within the study area was determined based on a site assessment conducted by a mammal expert with local knowledge, Dr. Michael O'Farrell.

(g) Regional Connectivity/Wildlife Movement Corridor

An analysis of wildlife movement was conducted based on information compiled from the literature, analysis of aerial photographs and topographic maps, direct observations made in the field during survey work, and an analysis of existing wildlife movement functions. Relative to corridor issues, the focus of this assessment is to determine if the change of the existing land use within the study area will have significant impacts on the regional wildlife movement associated with the study area and the immediate vicinity.

The *North Fontana Interim MSHCP Policy* was reviewed since a small portion of the northernmost boundary of the study area is located within the Multiple Species Habitat Conservation Plan (MSHCP) boundary (Michael Brandman Associates, 2004). Additionally, the *South Coast Missing Linkage Project: A Linkage Design for the San Gabriel-San Bernardino Connection* document was reviewed (Penrod *et al*., 2004).

(h) Jurisdictional Delineation

A jurisdictional delineation of all existing on-site drainage features was conducted by PCR Principal Regulatory Scientist Amir Morales on May 15, 2012 to assess the extent of "waters of the U.S."/"waters of the State" and/or wetlands under the jurisdiction of the USACE/ RWQCB, and/or streambed and associated riparian habitat under the jurisdiction of the CDFW. Published regulatory guidelines were followed, including USACE methodologies (USACE, 2008a; USACE, 2008b; Environmental Laboratory, 1987). The jurisdictional delineation was reassessed by PCR biologist Ezekiel Cooley on February 20, 2014 for the Westgate Center and Westgate Village portions of the study area.

(4) Approach for EIR Impact Assessment

The following discussion examines the potential impacts to plant and wildlife resources that may occur as a result of implementation of the Westgate Specific Plan. For the purpose of this assessment, project-related

impacts take two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or eventual habitation/operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to study areas.

The determination of impacts in this analysis is based on both the proposed Westgate Specific Plan and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Since this analysis is based on a specific plan, the impacts discussion is general in nature based on anticipated impacts from the general proposed development plan. As required by CEQA, future proposed projects within the Westgate Specific Plan area would require independent environmental approval. As part of that approval, a detailed project-specific impacts analysis would be required. Any recommended mitigation measures and conditions of approval for future projects are discussed below.

The biological values of resources within, adjacent to, and outside the area to be affected by the Westgate Specific Plan were determined by consideration of several factors, as applicable. These included the overall size of habitats to be affected, the study area's previous land uses and disturbance history, the study area's surrounding environment and regional context, the on-area biological diversity and abundance, the presence of sensitive and special-status plant and wildlife species, the study area's importance to regional populations of these species, and the degree to which on-area habitats are limited or restricted in distribution on a regional basis and, therefore, are considered sensitive in themselves. Whereas this assessment is comprehensive, the focus is on sensitive plant communities/habitats, resources that play an important role in the regional biological systems, and special-status species.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including cultural resources. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to cultural resources would occur if the project would result in the following:

Threshold 1: Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS (refer to Impact Statement 4.D-1 below);

Threshold 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS (refer to Impact Statement 4.D-2 below);

Threshold 3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement 4.D-3 below);

Threshold 4: 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 (refer to Impact Statement 4.D-4 below);

Threshold 5: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands) (refer to Impact Statement 4.D-5 below); or

Threshold 6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan (refer to Impact Statement 4.D-6 below).

For the purposes of the following impact analysis the following definitions apply:

- "Substantial adverse effect" means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive natural community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis the prescribed geographical area is considered to be the region that includes the USGS topographic quadrangles for the study area, namely Fontana, Devore, Cucamonga Peak, Guasti and Fontana. For some species, the geographic area may extend to the vicinity of the study area based on known distributions of the species. The vicinity of the study area is considered to comprise the following USGS topographic quadrangles: Mount San Antonio, Telegraph Peak, Cajon, Lake Arrowhead, Mount Baldy, Harrison Mountain, San Dimas, Ontario, San Bernardino South, Prado Dam, Riverside West, Riverside East and Sunnymead.

- "Conflict" means contradiction of a magnitude, which based on foreseeable circumstances, would preclude or prevent substantial compliance.

- "Rare" means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the FESA.

c. Project Design Features

The proposed Westgate Specific Plan would establish guidance for future development of urban uses within the project area, including the type and location of various land uses, development standards such as

allowable densities and building heights, and design guidelines such as architectural styles and landscaping. Each future development project on-site would be governed by these Specific Plan components, and would be subject to review and approval by the City as are all proposed projects. Similarly, all future projects within the Specific Plan area would be required, as necessary, to conduct further site-specific biological surveys and jurisdictional delineations to identify the particular resources (if any) located within the development site. Accordingly, should resources be determined to be present and potentially affected by the proposed development, the project applicant would be required to obtain permits from various agencies, including the USACE, RWQCB, and CDFW, if the agencies deem them necessary. However, at this stage of planning, with no specific developments proposed for any of the affected Planning Areas, permitting by the resource agencies is not possible and therefore would be conducted, as needed, when future development projects are brought forth.

d. Analysis of Project Impacts

(1) Candidate, Sensitive, and Special Status Species

Threshold	Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS?

Impact 4.D-1 *Implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.*

(a) Sensitive Plant Species

Development of the study area would result in the direct removal of numerous common plant species within the study area. A list of plant species observed within the study area is included in Appendix A, *Floral and Faunal Compendium*. Common plant species present within the study area occur in large numbers throughout the region and their removal does not meet the significance thresholds defined above. Therefore, impacts to common plant species would be considered a less than significant impact and no mitigation measures would be required.

The sensitive plant species discussed above under Existing Conditions, including the federally and state endangered slender-horned spineflower, Santa Ana River woollystar, and Nevin's barberry, may occur within the region but were determined to have no potential for occurrence based on either the lack of suitable habitat or lack of any known occurrences. Therefore, no impacts to these sensitive plant species would occur and no mitigation measures would be required.

The remaining 10 sensitive plant species were identified as having a low potential for occurrence based on the presence of limited habitat that is of poor quality. Potentially suitable habitat for sensitive species is limited to the southern portion of the study area within Westgate Village, namely areas mapped as RSS, Disturbed RSS, RAFSS/Disturbed, and Disturbed RAFSS. Individual projects under the Westgate Specific Plan would conduct focused surveys for sensitive plant species within these habitats, if determined warranted by a qualified biologist at the time the project is processed. If any sensitive species are determined present,

mitigation measures would be required if impacts are determined significant based on the number of individuals proposed for impacts compared with the regional populations for the species.

(b) Sensitive Wildlife Species

Development of the study area would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the study area is included in Appendix A, *Floral and Faunal Compendium*, of the project's BRA (Appendix C of this Draft EIR). Due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds defined above. Therefore, impacts to common wildlife species would be considered less than significant impact and no mitigation measures would be required.

Several of the sensitive wildlife species are discussed above under Existing Conditions and in Appendix C of the project's BRA (Appendix C of this Draft EIR), but are not expected to occur within the study area due to the lack of suitable habitat, including but not limited to the federally endangered Delhi Sands flower-loving fly, state endangered willow flycatcher (*Empidonax traillii*), the federally and state endangered southwestern willow flycatcher, the federally and state endangered least Bell's vireo. Therefore, no impacts to these sensitive wildlife species would occur and no mitigation measures would be required. Two additional species are not expected to occur due to lack of known occurrences in the study area and limited/poor quality habitat, namely Stephen's kangaroo rat (*Dipodomys stephensi*) and San Bernardino kangaroo rat. No impacts to these species are anticipated.

Several additional sensitive wildlife species were observed or have a low or moderate potential to occur within the study area. Sensitive wildlife species which were observed within the study area include loggerhead shrike (*Lanius ludovicianus*) and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Additional sensitive wildlife species with low to moderate potential to occur within the study area include red-diamond rattlesnake (*Crotalus ruber*), coast horned lizard (*Phyrynosoma blainvillii*), orange-throated whiptail (*Aspidoscelis hyperythra*), silvery legless lizard (*Anniella pulchra pulchra*), golden eagle, white-tailed kite, northern harrier, Cooper's hawk, sharp-shinned hawk, ferruginous hawk, American peregrine falcon, burrowing owl, grasshopper sparrow (*Ammodramus savannarum*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*), coastal California gnatcatcher, tricolored blackbird (*Agelaius tricolor*), western mastiff bat (*Eumops perotis*), pallid bat (*Antrozous pallidus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), and southern grasshopper mouse (*Onychomys torridus ramona*). Apart from golden eagle, white-tailed kite, American peregrine falcon, and coastal California gnatcatcher, all the remaining species are considered Species of Special Concern (SSC) or Watch List (WL) by the CDFW and do not carry a federal or state listing as threatened or endangered. The loss of individuals as a result of the Westgate Specific Plan would not expect to reduce regional population numbers. Therefore, impacts to these sensitive wildlife species are considered adverse but less than significant and no mitigation measures would be required. The exception to this is burrowing owl, for which impacts are potentially significant and mitigation is required pursuant to DFG published guidelines (DFG, 2012). In addition, significant impacts could occur to many of the referenced bird species if provisions were not in place for their protection under the MBTA.

Of the above-listed species, golden eagle, white-tailed kite, and American peregrine falcon are fully protected species, and coastal California gnatcatcher is a federally threatened species. In addition, USFWS mapped critical habitat for San Bernardino kangaroo rat occurs in the northern portion of the study area within the Falcon Ridge Village (refer to **Figure 4.D-5**, *Impacts to Critical Habitat*, below). A discussion of these species is provided below.

Golden Eagle, White-Tailed Kite, and American Peregrine Falcon: As previously discussed, the presence of golden eagle (rare in the vicinity), white-tailed kite and American peregrine falcon would be limited to foraging only. Potential foraging habitat includes 249.72 acres of habitats including Disturbed/Ruderal, Ruderal, Ruderal/Disturbed and Non-native Grassland areas). Based on the disturbed nature and the presence of development surrounding the study area, the quality of foraging habitat is considered to be low. The loss of foraging habitat as a result of the Westgate Specific Plan would not be expected to impact the foraging of these species. Therefore, impacts to foraging habitat would be considered adverse but less than significant and no mitigation measures would be required.

Coastal California Gnatcatcher: As previously discussed, coastal California gnatcatcher was determined to have a low potential for occurrence due to limited and poor quality habitat, including RSS, Disturbed RSS, RAFSS/Disturbed, and Disturbed RAFSS. Individual projects under the Westgate Specific Plan would conduct focused surveys for coastal California gnatcatcher within these habitats, if determined warranted by a qualified biologist at the time the project is processed. These habitats are limited to the southern portion of the study area within the proposed Westgate Village. If this species is determined present, consultation with USFWS would be required, in addition to mitigation to reduce impacts to a less than significant level. Mitigation measures are provided below.

San Bernardino Kangaroo Rat: Consultation would be required with USFWS due to the presence of mapped critical habitat (see Figure 4.D-5 below). However, no suitable habitats for SBKR exists within the area mapped as critical habitat within the Falcon Ridge Village portion of the study area, or in other portions of the study area, as determined following an assessment by Dr. Michael O'Farrell (see Appendix D of the project's BRA). As such, no mitigation measures would be required.

Overall, with implementation of applicable mitigation measures, impacts to candidate, sensitive, or special status species or their habitats would be less than significant.

(2) Riparian Habitat and Sensitive Natural Communities

Threshold	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS?

Impact 4.D-2 *Implementation of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFW or USFWS. This impact is considered less than significant with mitigation incorporated.*

The study area supports two habitats that are considered sensitive natural communities, including RSS (RSS and Disturbed RSS) and RAFSS (RAFSS/Disturbed and Disturbed RAFSS). These communities within the study area are highly disturbed and are of low quality for sensitive plant and wildlife species. As outlined in

Table 4.D-1, these areas occupy the following acreages within the Westgate Village portion of the study area and have the potential to be impacted by future projects: 23.62 acres of RSS, 0.46 acre of Disturbed RSS, 5.23 acres of RAFSS/Disturbed, and 9.22 acres of Disturbed RAFSS. An illustration of impacts to plant communities is provided below in **Figure 4.D-6**, *Impacts to Plant Communities*. Impacts to RSS and RAFSS habitats would be significant and would require mitigation, which is proposed at a minimum 0.5:1 ratio for Disturbed RSS and Disturbed RAFSS based on the high density of non-native species, human disturbance, and remnant nature of the areas, and at a minimum 1:1 ratio for RSS and RAFSS/Disturbed based on the limited and disturbed nature of the areas (unless the habitat is occupied by coastal California gnatcatcher, as discussed above).

The study area does not support any riparian habitat, but does support drainages that would likely be considered jurisdictional pursuant to CDFW, as shown below in **Figure 4.D-7**, *Impacts to Jurisdictional Features*. Individual projects that may propose impacts to these drainages under the Westgate Specific Plan would be required to comply with Section 1602 of the California Fish and Game Code, including mitigation subject to approval by CDFW. Implementation of applicable mitigation would reduce impacts to a less than significant level.

(3) Wetlands

Threshold	Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact 4.D-3 *Implementation of the proposed project would not affect federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. No impact would occur due to absence of wetlands within the proposed project area.*

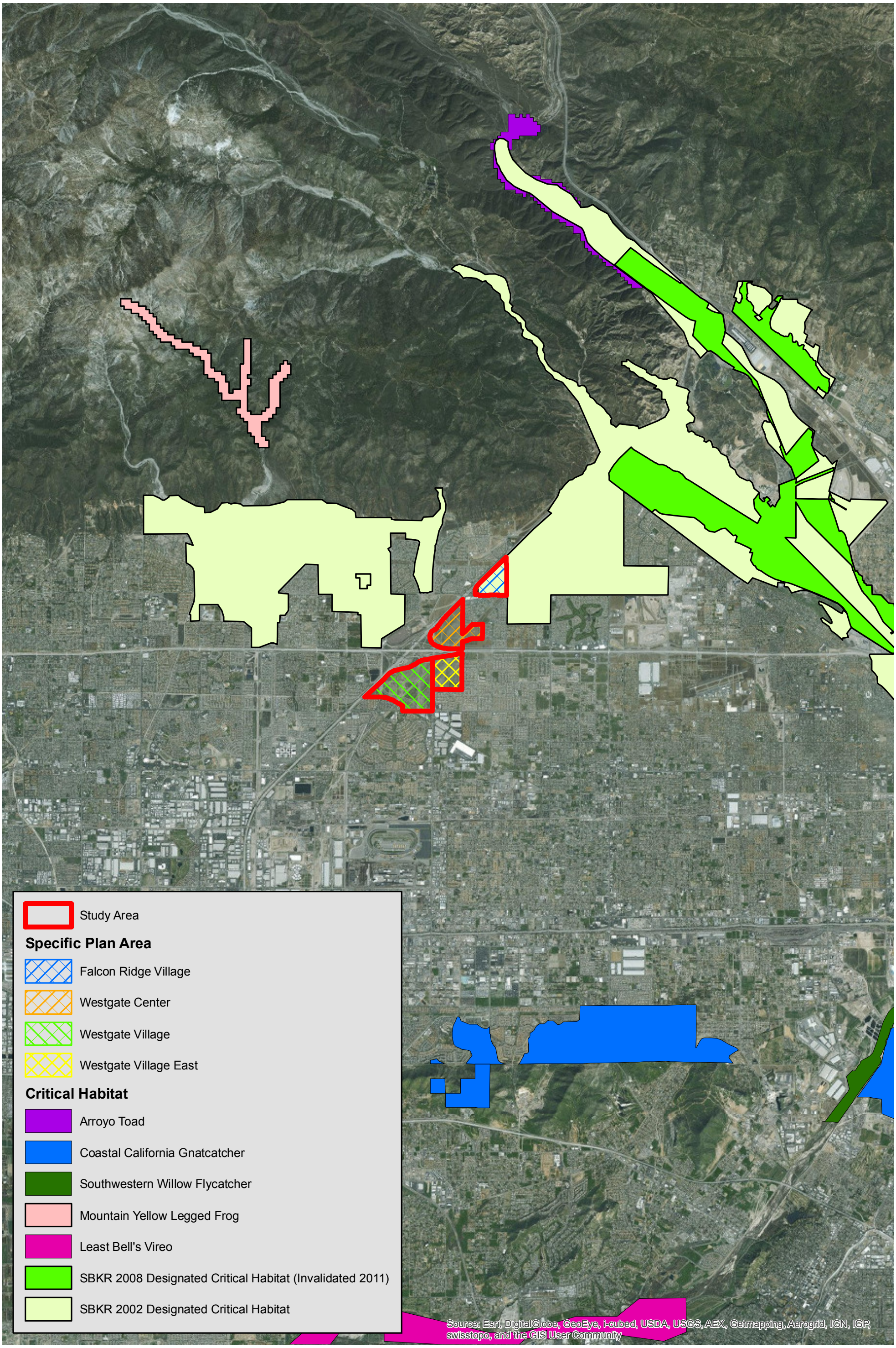
No wetlands occur within the Westgate Specific Plan study area based on assessments conducted for this BRA. As such, no impacts to wetlands would occur by future projects within the Westgate Specific Plan.

The study area does support non-wetland drainages that would likely be considered jurisdictional pursuant to USACE/RWQCB. Individual projects that may propose impacts to these drainages under the Westgate Specific Plan would be required to comply with Sections 404/401 of the CWA, including mitigation subject to approval by USACE/RWQCB. Compliance with these regulations would reduce impacts to a less than significant level.

(4) Wildlife Movement

Threshold	Would the 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?

Impact 4.D-4 *Implementation of the proposed project would not 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. This impact is considered less than significant with mitigation incorporated.*



PCR

Impacts to Critical Habitat

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2012.

FIGURE

4.D-5

Study Area

Specific Plan Area

Falcon Ridge Village

Westgate Center

Westgate Village

Westgate Village East

Plant Communities

DEV - Developed

D - Disturbed

D/RUD - Disturbed / Ruderal

RUD - Ruderal

RUD/D - Ruderal / Disturbed

VINE - Former Vineyard

WR - Windrow

LDSC - Landscaped

NNG - Non-native Grassland

NNG/D - Non-native Grassland / Disturbed

RSS - Riversidean Sage Scrub

DRSS - Disturbed Riversidean Sage Scrub

RAFSS/D - Riversidean Alluvial Fan Sage Scrub / Disturbed

DRAFSS - Disturbed Riversidean Alluvial Fan Sage Scrub

15

210

Lytle Creek Rd.

Summit Ave.

San Sevaine Ave.

Baseline Ave.

N

1,500 0 1,500 Feet

PCR

Impacts to Plant Communities

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2014.

FIGURE

4.D-6

Study Area

Specific Plan Area

Falcon Ridge Village

Westgate Center

Westgate Village

Westgate Village East

Jurisdictional Features (Concrete Lined Trapezoidal Channels)

USACE/RWQCB/CDFW Jurisdiction

CDFW Jurisdiction

Off-Site USACE/RWQCB/CDFW Jurisdiction

Off-Site CDFW Jurisdiction

Non-Jurisdictional Features

Detention Basin

Remnant Drainage Feature

Off-Site Roadside Ditch

15

Lytle Creek Rd.

Summit Ave.

Maintained Channel

210

San Sevaine Channel

15

Etiwanda Channel

San Sevaine Ave.

Baseline Ave.

PCR

N

1,500 0 1,500 Feet

Impacts to Jurisdictional Features

Westgate Specific Plan

Source: Aerial Express, 2010; Hall & Foreman Inc., 2012; PCR Services Corporation, 2014

FIGURE

4.D-7

This page is intentionally blank.

(a) Wildlife Movement

As described above, the study area supports live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the study area. Although implementation of the Westgate Specific Plan would result in disturbances to local wildlife movement within the study area, those species adapted to urban areas would be expected to persist in the study area following construction. As such, impacts would be less than significant and no mitigation measures would be required.

Since the study area does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

(b) Migratory Species

The study area has the potential to support both raptor and songbird nests due to the presence of limited trees, in addition to shrubs and ground cover. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance above. Any potential impacts to raptor and songbird nests would be considered potentially significant. Compliance with the MBTA, as required by mitigation below, would reduce impacts to a less than significant level.

(5) Policies or Ordinances Protecting Biological Resources

Threshold	Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

Impact 4.D-5 *Implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands). This impact is considered less than significant.*

The study area supports limited trees within the Windrow and the RAFSS areas. Any potential impacts to regulated trees by future projects under the Westgate Specific Plan could be considered potentially significant. However, compliance with the City's tree ordinance would reduce impacts to a less than significant level. Furthermore, the proposed Specific Plan would not conflict with applicable goals and policies contained in the City's General Plan regarding biological resources, as discussed below in **Table 4.D-3**, *General Plan Consistency Analysis*. As shown in Table 4.D-3, impacts related to consistency with the Fontana General Plan regarding biological resources would be less than significant.

Table 4.D-3

General Plan Consistency Analysis

Fontana General Plan Open Space & Conservation Element	
Goal/Policy	**Project Consistency Statement**
Goal 1.2: Conserve Natural Habitat and Protect Rare, Threatened and Endangered Species.	
Policy 1.2-1: Encourage the preservation of natural habitat in conjunction with private or public development projects.	**Consistent.** The proposed project is characterized by former vineyards and generally heavily disturbed open space areas. While limited areas of potential habitat are located on-site, implementation of the proposed project would require mitigation for any impacts to viable habitat, thus ensuring overall preservation of such resources.
Policy 1.2-2: Require mitigation for removal of any natural habitat, including restoration of degraded habitat of the same type, creation of new or extension of existing habitat of the same type, financial contribution to a habitat conservation fund administered by a federal, state or local government agency, or by a non-profit conservancy.	**Consistent.** Mitigation measures provided below would serve to address impacts related to removal of natural habitat.
Policy 1.2-3: Apply local CEQA procedures to identify potential impacts to rare, threatened and endangered species.	**Consistent.** As required by CEQA, this Draft EIR identifies impacts of the proposed project on rare, threatened and endangered species.
Policy 1.2-4: Require evidence of satisfactory compliance with any required state and/or federal permits, prior to issuance of grading permits for individual projects.	**Consistent.** Prior to issuance of any grading permits for future development on-site, project applicants would be required to obtain permits, as necessary, from affected resource agencies.
Policy 1.2-5: Require site-specific surveys to identify the presence/absence of sensitive species and natural communities, for all projects located in areas identified in the Sensitive Biotic Resources database.	**Consistent.** Site-specific surveys for sensitive resources are required as mitigation for future development projects on-site, where determined necessary.

Source: PCR Services Corporation, 2014

(6) Habitat Conservation and Natural Community Conservation Plans

Threshold	Would the 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?

Impact 4.D-6 *Implementation of the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. This impact is considered less than significant.*

The northern portion of the study area is within the proposed North Fontana MSHCP Plan area totaling approximately 7.69 acres. As outlined in the *North Fontana Interim MSHCP Policy*, a tiered development mitigation fee is proposed on new development in North Fontana based on their potential for supporting sensitive species. These tiers include (1) Habitat occupied by SBKR or CAGN; (2) Habitat determined suitable for SBKR and/or CAGN; (3) Disturbed RAFSS habitat considered restorable to habitat suitable for SBKR and/or CAGN; and (4) Habitat that is no longer suitable for SBKR, CAGN or other sensitive species found in RAFSS and RSS plant communities. Habitats within those tiers would be subject to a mitigation fee of $1,440 per acre and mitigation ratios ranging from 5:1 for occupied habitat, to 0.5:1 for unsuitable habitat. However, the 7.69 acres of habitat within the proposed North Fontana MSHCP comprises Non-Native Grassland, which is consistent with mapping provided in the *North Fontana Interim MSHCP Policy*. Since Non-Native Grassland is not within the habitat tiers listed above, no significant impacts would occur and no mitigation would be required.

4. MITIGATION MEASURES

The following mitigation measure addresses the potentially significant impact of the proposed project on biological resources:

a. Sensitive Wildlife Species

Mitigation Measure D-1 Prior to the issuance of any grading permit for the Westgate Village area or Falcon Ridge Village Area, habitat assessments should be conducted to confirm the presence and extent of suitable habitat for coastal California gnatcatcher and San Bernardino kangaroo rat (SBKR). Specifically, Riversidean Sage Scrub (RSS) and Riversidean Alluvial Fan Sage Scrub (RAFSS) was mapped in the Westgate Village area during 2012 surveys and may be suitable for coastal California gnatcatcher, and USFWS mapped designated critical habitat for SBKR occurs in the Falcon Ridge Village area. If suitable habitat is present, focused protocol surveys should be conducted. The assessments and focused surveys should be conducted by a biologist(s) possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit (herein referred to as a USFWS permitted biologist) and following the required USFWS survey protocols.

If coastal California gnatcatcher and/or SBKR are found to occupy the site, and/or if suitable habitat within SBKR designated critical habitat is proposed for impacts, the measures outlined below shall be incorporated. The project applicant shall also consult with USFWS pursuant to the Federal Endangered Species Act, either through a Section 7 or a Section 10 consultation to ensure that proposed impacts are not likely to jeopardize the continued existence of the listed species or destroy or adversely modify SBKR designated critical habitat. The proposed measures may be refined during the consultation process.

Coastal California Gnatcatcher

1. Avoid CAGN occupied habitat to the greatest extent feasible, and preserve avoided habitat and any mitigation areas in perpetuity (see 2. and 3. below).

2. Mitigate for any impacts to CAGN occupied habitat at a minimum 2:1 ratio of habitat restoration or creation either on-site and/or off-site on land acquired for the purpose

of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits should occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat.

3. Provide long-term management of preserved and/or mitigation habitat.

4. Avoid direct mortality of individual CAGN during construction by:

   a. Removing any vegetation within CAGN occupied habitat outside the breeding season (the breeding season is February 15 to August 31); and

   b. Monitoring by a qualified biologist during vegetation removal to flush out any non-breeding birds away from the clearing activities.

5. Avoid indirect impacts to CAGN including noise impacts during construction and edge effects post-construction, by implementing measures to buffer and avoid human-wildlife conflicts as appropriate. Proposed measures are as follows:

   <u>During Construction</u>

   a. Construction noise shall not exceed 60 dB(A) Leq in avoided occupied coastal California gnatcatcher habitat between February 15 and August 31 unless noise attenuation measures are implemented to reduce noise levels below this level, or the USFWS approves noise levels above this threshold. Noise attenuation measures may include, but are not limited to, establishing construction set-back buffers, equipment noise mufflers, and noise walls, as determined necessary by an acoustic specialist and in consultation with the project biologist. Monitoring by a qualified biologist should also occur during construction to ensure noise levels are maintained below the threshold. Alternatively, construction noise levels above 60 dB(A) Leq may be approved by USFWS if monitoring by a USFWS permitted biologist for this species determines that the construction noise is not impacting the expected breeding behavior of the birds.

   <u>Post Construction</u>

   b. Installation of cat-proof fencing at the perimeter of development where it abuts preserved areas.

   c. Restricting access to preservation areas for conservation activities only.

   d. Direction of all night lighting within development areas away from the preserved areas.

   e. Installation of signage to direct human activity away from preserved habitat areas.

f. Prohibition of unleashed dogs within preserved habitat areas.

g. Implementation of an awareness program to educate tenants and/or residents about the conservation values associated with preserved habitat areas.

SBKR

1. Avoid SBKR occupied or suitable habitat within SBKR designated critical habitat to the greatest extent feasible, and preserve avoided habitat and any mitigation areas in perpetuity (see 2. and 3. below).

2. Mitigate for any impacts to SBKR occupied or suitable habitat within SBKR designated critical habitat at a minimum 2:1 ratio of habitat restoration or creation either on-site and/or off-site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits should occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat.

3. Provide long-term management of preserved and/or mitigation habitat.

4. Avoid direct mortality of individual SBKR during construction by:

   a. Installation of exclusionary fencing at the limits of construction within suitable habitat areas; and

   b. Live-trapping of SBKR within suitable habitat in construction areas and the relocation of trapped individuals to one or more biologically appropriate receiver sites (defined as suitable habitat that is known to be unoccupied, is below population carrying capacity levels, and/or where scrub vegetation has been restored and colonization by the species has not occurred). Trapping shall be conducted by a USFWS permitted or approved biologist.

5. Avoid indirect impacts to SBKR as a result of edge effects post-construction by implementing measures to buffer and avoid human-wildlife conflicts as appropriate, such as:

   a. Installation of cat-proof fencing at the perimeter of development where it abuts preserved areas.

   b. Restricting access to preservation areas for conservation activities only.

   c. Direction of all night lighting within development areas away from the preserved areas.

   d. Installation of signage to direct human activity away from preserved habitat areas.

e. Prohibition of unleashed dogs within preserved habitat areas.

f. Implementation of a homeowner's awareness program to educate residents about the conservation values associated with preserved habitat areas.

Mitigation Measure D-2 Focused surveys for burrowing owl shall be conducted during the breeding season prior to vegetation clearing or ground disturbing activities by a qualified biologist with experience conducting surveys for this species. Surveys shall be conducted in suitable habitat as determined by the qualified biologist based on a field assessment of site conditions at the time of the survey, including habitats such as the Ruderal and Non-native Grassland plant communities observed during the 2012 survey. The survey methodology shall follow the protocol provided as Appendix D of the *Staff Report on Burrowing Owl Mitigation* published by Department of Fish and Wildlife (March 7, 2012). Pursuant to this protocol four survey visits are required, including at least one site visit between February 15 and April 15, and a minimum of three survey visits at least three weeks apart between April 15 and July 15 (with at least one visit after June 15). The results of the focused surveys are typically considered valid for one year after completion.

If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the 2012 *Staff Report on Burrowing Owl Mitigation* including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the *Staff Report on Burrowing Owl Mitigation*.

b. Riparian Habitat and Sensitive Natural Communities

Mitigation Measure D-3 Prior to the issuance of any grading permit in areas determined to support sensitive species or sensitive plant communities (e.g., RSS and RAFSS) to which significant impacts would occur, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared. The HMMP shall offset impacts to the species and/or plant communities, focusing on the creation of equivalent habitats within disturbed habitat areas within the study area and/or off-site. In addition, the HMMP shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. Mitigation for impacts shall be offset by on- or off-site replacement, restoration, or enhancement of each respective sensitive plant species/community within an area dedicated for conservation. Ratios of mitigation to impacts shall occur at no less than 0.5:1 for disturbed, remnant plant populations/communities (e.g. Disturbed RSS and Disturbed RAFSS), and at a minimum 1:1 ratio for less disturbed plant populations/communities (e.g. RSS and RAFSS/Disturbed). Mitigation shall occur in one or more of the following ways, as determined appropriate by a qualified biologist:

1. Transplantation of sensitive plant species (on-site or off- site);

2. Seeding of plant species (on-site or off- site);

3. Planting of container plants (on-site or off- site);

4. Salvage of on-site duff and seed bank and subsequent dispersal (on-site or off- site); and/or

5. Off-site preservation at an established mitigation bank or other area dedicated for conservation.

c. Jurisdictional Features

Mitigation Measure D-4 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features on **Figure 4.D-7**, *Impacts to Jurisdictional Features*, the project applicant shall obtain a CWA Section 404 permit from the USACE, a CWA Section 401 permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. On- and/or off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" at a ratio no less than 1:1 for permanent impacts, and for temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate as appropriate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

2. On- and/or off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate as appropriate). Off-site replacement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank.

d. Migratory or Nesting Birds

Mitigation Measure D-5 Prior to the issuance of any grading permit that would all removal of habitat containing raptor and songbird nests, the project applicant shall demonstrate to the satisfaction of the City of Fontana that either of the following have been or will be accomplished.

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.

2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

5. CUMULATIVE IMPACTS

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

The proposed North Fontana MSHCP identifies areas for long-term conservation and management. Once the MSHCP is adopted, cumulative impacts of proposed projects within authorized take lands will have been minimized through the conservation of land. The *North Fontana Interim MSHCP Policy* intends to implement the intent of the MSHCP prior to approval and adoption of the plan, including acquisition of mitigation lands. However, since only a small portion (less than 8 acres) of the study area is within the proposed North Fontana MSHCP, cumulative impacts from the Westgate Specific Plan are addressed below. Since the study area was determined not to function as a regional wildlife movement corridor, cumulative impacts to wildlife movement are not further analyzed in this document.

Cumulative impacts to the following biological resources are considered to be less than significant with implementation of the mitigation measures and conditions of approval outlined above:

- Sensitive plant communities (e.g., RSS and RAFSS);
- Sensitive wildlife species (e.g., coastal California gnatcatcher and burrowing owl, if found, in addition to raptors, other migratory birds);
- Sensitive plant species (if found);
- Jurisdictional drainages.

The loss of approximately 24.08 acres of RSS and Disturbed RSS, in addition to 14.45 acres of RAFSS/Disturbed and Disturbed RAFSS is not expected to substantially affect these sensitive plant communities to a point where their distribution in the region is threatened. This is based on the fact that these communities within the study area are highly disturbed and occur in remnant patches with no off-site connectivity to other similar blocks of habitat. Also, in the case of the RAFSS, the habitat is no longer supported by the required hydrological processes, and is therefore expected to transition into a more upland plant community. The proposed mitigation at a minimum 1:1 ratio would result in a no-net-loss of these sensitive plant communities. With the proposed mitigation, impacts would not be considered cumulatively significant.

If coastal California gnatcatcher or any sensitive plant species are observed within the study area following focused surveys conducted on a project-by-project basis, additional mitigation is proposed that would result in a net gain of their habitat (in the case of the coastal California gnatcatcher), and avoidance/minimization of direct impacts (through the permitting process for coastal California gnatcatcher, and through transplanting/seeding for sensitive plant species). Mitigation is also proposed to avoid direct impacts to

burrowing owl, raptors and migratory bird species, through compliance with the MBTA and the Burrowing Owl Consortium guidelines. With the proposed mitigation and compliance with existing regulations, impacts would not be considered cumulatively significant.

The loss of approximately 249.72 acres of potential foraging habitat for raptor species (including Disturbed/Ruderal, Ruderal, Ruderal/Disturbed and Non-native Grassland areas) is not expected to substantially affect these species to a point where their survival in the region is threatened. These species are relatively mobile and are expected to locate additional foraging habitat remaining in the region. Furthermore, the study area is currently predominately former vineyards and is surrounded by developed, and therefore, does not serve as optimal foraging habitat for these species. As such, impacts would not be considered cumulatively significant.

Any impacts to jurisdictional features would be subject to permitting with the regulatory agencies, including USACE, RWQCB and/or CDFW. With the proposed mitigation and compliance with existing regulations through the permitting process, impacts would not be considered cumulatively significant, and the project's contribution to cumulative impacts would not be considerable.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Westgate Specific Plan, with implementation of applicable mitigation measures, would result in less than significant impacts to sensitive wildlife species, migratory and/or nesting birds, sensitive plant species and communities, jurisdictional features, and regulated trees.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
E. CULTURAL RESOURCES

1. INTRODUCTION

The purpose of this section is to evaluate potential impacts on cultural resources including archaeological, historical, and paleontological resources that could occur with implementation of the proposed project.

Archaeology is the recovery and study of material evidence of human life and culture of past ages. Over time, this material evidence becomes buried, fragmented or scattered or otherwise hidden from view. It is not always evident from a field survey if archaeological resources exist within a given area. Thus, the possible presence of archaeological materials must often be determined based upon secondary indicators, including the presence of geographic, vegetative, and rock features which are known or thought to be associated with early human life and culture, as well as knowledge of events or material evidence in the surrounding area. Archaeological resources may include both prehistoric remains and remains dating to the historical period. Prehistoric (or Native American) archaeological resources are physical properties resulting from human activities that predate written records and are generally identified as isolated finds or sites. Prehistoric resources can include village sites, temporary camps, lithic (stone tool) scatters, rock art, roasting pits/hearths, milling features, rock features, and burials. Historic archaeological resources can include refuse heaps, bottle dumps, ceramic scatters, privies, foundations, and burials and are generally associated in California with the Spanish Mission Period to the mid-20th century of the American Period.

Historical resources are buildings, structures, sites, places, or objects which are listed in or eligible for listing in the National Register of Historic Places, California Register of Historical Resources or a local register of historical resources. Architectural, engineering, or landscape resources from the historic period such as buildings, roads, bridges, aqueducts, or agricultural properties that are determined to be historically significant or significant in architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the determination is supported by substantial evidence in light of the whole record.

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints from a previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

The analysis of cultural resources presented in this section is derived from a technical report prepared by PCR Services Corporation in July 2012. The *Cultural Resources Assessment* is provided in Appendix D of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Prehistoric Background

Prehistory is most easily discussed chronologically, in terms of environmental change and recognized cultural developments. Several chronologies have been proposed for inland Southern California, the most widely accepted of which is Wallace's four-part Horizon format (1955), which was later updated and revised by Claude Warren (1968). The advantages and weaknesses of southern California chronological sequences are reviewed by Warren (in Moratto 1984), Chartkoff and Chartkoff (1984), and Heizer (1978). The following discussion is based on Warren's (1968) sequence, but the time frames have been adjusted to reflect more recent archaeological findings, interpretations, and advances in radiocarbon dating.

(a) Paleo-Indian Period (ca. 13,000 – 11,000 years before present [YBP])

Little is known of Paleo-Indian peoples in inland southern California, and the cultural history of this period follows that of North America in general. Recent discoveries in the Americas have challenged the theory that the first Americans migrated from Siberia, following a route from the Bering Strait into Canada and the Northwest Coast sometime after the Wisconsin Ice Sheet receded (ca. 14,000 YBP), and before the Bering Land Bridge was submerged (ca. 12,000 YBP). A coastal migration route somewhat before that time is also possible. The timing, manner, and location of this crossing are a matter of debate among archaeologists, but the initial migration probably occurred as the Laurentide Ice Sheet melted along the Alaskan Coast and interior Yukon. The earliest radiocarbon dates from the Paleo-Indian Period in North America come from the Arlington Springs Woman site on Santa Rosa Island. These human remains date to approximately 13,000 YBP (Johnson et al. 2002). Other early Paleo-Indian sites include the Monte Verde Creek site in Chile (Meltzer et al. 1997) and the controversial Meadowcroft Rockshelter in Pennsylvania. Both sites have early levels dated roughly at 12,000 YBP. Life during the Paleo-Indian Period was characterized by highly mobile hunting and gathering. Prey included megafauna such as mammoth and technology included a distinctive flaked stone toolkit that has been identified across much of North America and into Central America. They likely used some plant foods, but the Paleo-Indian toolkit recovered archaeologically does not include many tools that can be identified as designed specifically for plant processing.

The megafauna that appear to have been the focus of Paleo-Indian life went extinct during a warming trend that began approximately 10,000 years ago, and both the extinction and climatic change (which included warmer temperatures in desert valleys and reduced precipitation in mountain areas) were factors in widespread cultural change. Subsistence and social practices continued to be organized around hunting and gathering, but the resource base was expanded to include a wider range of plant and game resources. Technological traditions also became more localized and included tools specifically for the processing of plants and other materials. This constellation of characteristics has been given the name "Archaic" and it was the most enduring of cultural adaptations to the North American environment.

(b) Archaic Period (ca. 11,000 – 3,500 YBP)

The earliest Archaic Period life in inland southern California has been given the name San Dieguito tradition, after the San Diego area where it was first identified and studied (Warren 1968). Characteristic artifacts include stemmed projectile points, crescents and leaf-shaped knives, which suggest a continued subsistence, focus on large game, although not megafauna of the earlier Paleo-Indian period. Milling equipment appears

in the archaeological record at approximately 7,500 years ago (Moratto 1984:158). Artifact assemblages with this equipment include basin milling stones and unshaped manos, projectile points, flexed burials under cairns, and cogged stones, and have been given the name La Jolla Complex (7,500–3,000 YBP). The transition from San Dieguito life to La Jolla life appears to have been an adaptation to drying of the climate after 8,000 YBP, which may have stimulated movements of desert peoples to the coastal regions, bringing milling stone technology with them. Groups in the coastal regions focused on mollusks, while inland groups relied on wild-seed gathering and acorn collecting.

(c) Late Prehistoric Period (ca. 3,500 YBP – A.D. 1769)

Cultural responses to environmental changes around 4,000–3,000 YBP included a shift to more land-based gathering practices. This period was characterized by the increasing importance of acorn processing, which supplemented the resources from hunting and gathering. Meighan (1954) identified the period after A.D. 1400 as the San Luis Rey complex. San Luis Rey I (A.D. 1400–1750) is associated with bedrock mortars and milling stones, cremations, small triangular projectile points with concave bases and Olivella beads. The San Luis Rey II (A.D. 1750–1850) period is marked by the addition of pottery, red and black pictographs, cremation urns, steatite arrow straighteners and non-aboriginal materials (Meighan 1954:223, Keller and McCarthy 1989:6). Work at Cole Canyon and other sites in southern California suggests that this complex, and the ethnographically described life of the native people of the region, were well established by at least 1,000 YBP (Keller and McCarthy 1989:80).

(d) Ethnographic Background

The project site is located along the fringes of territories traditionally affiliated to the Serrano and Gabrielino ethnographic groups at European contact. A brief review of the ethnography of these groups is provided below.

Serrano

Historically, the project site also appears to be located within Serrano territory. Altschul et al. (1984) have provided a useful overview of the ethnographic land-use patterns, social organization, and early ethnohistorical interactions in Serrano territory; pertinent aspects of this overview, along with ethnographic information obtained primarily from Strong (1929), Gifford (1918), Kroeber (1925), Bean and Smith (1978), and Harrington (Bean et al. 1981) are presented below.

The Serrano occupied the territory of the San Bernardino Mountains east to Mount San Gorgonio, the San Gabriel Mountains west to Mount San Antonio, and portions of the desert to the north and the fringe of San Bernardino Valley to the south (Kroeber 1925:615-616). Numbering no more than perhaps 1,500 people, the Serrano were scattered over a rugged, expansive landscape. The Serrano's most intensive cultural contacts were with the Pass Cahuilla, who occupied the territory to the southeast, and the Gabrielino, who occupied the lands westward to the Pacific coast.

Serrano clans were politically autonomous, although linked by ceremonial ties to other clans and peoples of other tribal groupings (i.e., the Cahuilla and Gabrielino). Each Serrano clan had a hereditary leader, or *kika*, and an assistant who was a ceremonial leader, or *paha* (Strong 1929:17-18). These individuals were central to the ritual life of the Serrano, providing leadership during yearly ceremonial periods. Kroeber (1925:617) indicates that villages were generally located where streams emerged from the foothills. Bean et al.

(1981:85-86) are considerably more precise in their descriptions of Serrano village and camp locations. Groups of lineages lived in villages at the valley margins in the winter and in smaller encampments at higher elevations in the summer. Proximity to water sources and adequate arrays of resources predictably dictated settlement location choices. Localities rich in oaks, pinyon, yucca, agave, or seasonal migratory fowl, for example, were favored for population convergence at peak "harvest" times. Streamside areas canyon mouths by alluvial fans, and flats near springs or lakes were frequently chosen as prime locations, with avoidance of wind and floods, and adequate defensive position also of considerable concern. Bean et al. (1981:85) note also that individual homes were quite scattered across the landscape in order to ensure privacy, to the extent that some "villages" covered up to five square miles. This clearly has important implications for archaeological interpretations of occupation sites.

Serrano residences were circular, domed, willow-and-tule thatch structures. The home of the *kika* also served as a large ceremonial house, and large, semi-subterranean, earth-covered sweathouses were found immediately adjacent to streams in most villages (Bean and Smith 1978). Subsistence during winter months consisted mostly of reliance on stored foods (acorns, pinyon nuts, mesquite beans) and some fresh meats and greens. In the spring, agave, cacti, greens, and a mix of game provided the bulk of the food resources. Many fruits and seeds became available during the summer months, but perhaps the richest season was autumn when major harvests of acorns, pinyon nuts, mesquite beans, and screwbeans occurred, and when communal rabbit hunts took place in the context of much feasting and ritual activity (Bean et al. 1981:86-87). In addition to occupation sites and food procurement sites, rock cairns ("offering" places along trials), cupule petroglyph sites, hot springs (sacred areas), sources of lithic materials suitable for the production of stone tools and other artifacts, and trails represent important land uses by the Serrano.

Serrano technology was very similar to neighboring cultural groups, particularly the Cahuilla. Bows and arrows were used commonly for the hunting of large game, and curved throwing sticks, traps, snares, and deadfalls were used for obtaining smaller game and birds. Primary food processing utensils included stone knives, stone or bone scrapers, pottery trays and bowls, baskets, horn and bone spoons, and stirrers, as well as mortars (of stone or wood), pestles, manos, and metates. Shells, wood, bone, stone, and plant fibers were used in making a variety of technomic and non-technomic items, including decorated blankets, rabbit skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles of turtle or tortoise shell, deer-hoof rattles, wood rasps, bone whistles, bull-roarers, flutes), feathered costumes, mats (for floor and wall coverings), bags and storage pouches, cordage (usually of yucca fiber), and nets (Bean 1962-1972; Benedict 1924; Drucker 1937; Strong 1929).

Gabrielino

The Gabrielino territory included the Los Angeles Basin, the coast of Aliso Creek in Orange County to the south, and Topanga Canyon in the north, the four southern Channel Islands, and watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers. Their name is derived from their association with Mission San Gabriel (Bean and Smith 1978). The Gabrielino were not the first inhabitants of the Los Angeles Basin, but arrived around 500 B.C. The language of the Gabrielino people has been identified as a Cupan language within the Takic family, which is part of the larger Uto-Aztecan language family. Uto-Aztecan speakers arrived in southern California in what is known as the Shoshonean migration, which current archaeological and linguistic evidence suggests originated in the Great Basin and displaced the already established Hokan speakers. The Gabrielino were advanced in their culture, social organization, religious beliefs, and art and material production. Class differentiation, inherited chieftainship, and intervillage alliances were all components of Gabrielino society. At the time of European contact, the Gabrielino were actively involved in

trade using shell and beads as currency. The Gabrielino were known for excellent artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry. The Gabrielinos evolved an effective economic system which managed food reserves (storage and processing), exchanged goods, and disturbed resources. Data collected and presented by Kroeber (1925) indicate that homes were made of tule mats on a framework of poles, but size and shape have not been recorded. Basketry and steatite vessels were used rather than ceramics; ceramics became common only toward the end of the mission period in the nineteenth century. The Gabrielino held some practices in common with other neighboring groups in southern California, such as the use of jimsonweed in ceremonies as did the Luiseño and Juaneño, but details of the practices and the nature of cultural interaction between the Gabrielino and other groups in southern California are currently unknown.

(2) Historic Background

(a) Development of the Cucamonga Valley

The Cucamonga Valley has a long history of settlement due in part to its landscape of plentiful small streams and open grasslands. Although Spain had claimed California as part of their colony since the sixteenth century, the first Spaniard to travel to the area of the site was Pedro Fages in 1772. Spanish soldiers and missionaries continued to travel through the area on their way to visit various missions and outposts in the vicinity. In the beginning of the nineteenth century, some Spaniards who had worked at the missions began to set up what would later be known as the "Ranchos." The Rancho era in California history was a period when much of the prime agricultural land in the state was divided into large parcels equaling thousands of acres apiece. These large estates were ruled over in a semi-feudal manner by men who had been deeded the land by first the Spanish crown, and later the Mexican government. In 1821, Mexico won independence from Spain and began to dismantle the mission system in California. As the missions began to secularize, they were transformed into small towns. It was during this time that "Americans" began to enter California. Many of the American Californians married into the Rancho families, a development that would transform land ownership in Mexican California.

The early history of the area surrounding the project site was centered on growing vineyards and producing wine. The Cucamonga Valley wine growing area includes parts of Rancho Cucamonga, Rialto, Fontana, and Ontario. In Rancho Cucamonga, located just west of the project site, Tiburco Tapia planted the first vineyard in the area in 1839. Tapia was deeded the property from the Mexican Governor Juan Batista Alvarado and the original adobe is still extant housing the Joseph Filippi Winery. The winery is the oldest in the state still in use.[1] In 1871, leading Los Angeles banker Isias W. Hellman with two partners bought five thousand acres of Rancho Cucamonga producing the famed "angelica" wine and his vineyards were the largest in the state for many years. When the railroad arrived forty years later, others began planting vineyards in the sandy soils just below the Cajon Pass, where water was plentiful. Many smaller vineyards created irrigation districts where irrigation troughs would run through multiple properties and water rights were shared collectively. Furthermore, Italian immigrant Secondo Guasti, on a trip to the Cucamonga Valley noticed that water flowed from the San Gabriel Mountains and ended suddenly at the Cucamonga Desert. Guasti believed that the water must be beneath the desert ground and he dug down to discover the water was there, roughly 25 feet below the surface. Guasti purchased eight square miles of the Cucamonga desert and planted it with over 100 varieties of grapes. Guasti built the city of "Guasti" and hired whole families from wine growing

[1] *Wine Country California, (Menlo Park: Lane Publishing Company) 1987, 173.*

regions of Italy to work his vineyards.[2] Between the late nineteenth century and the end of prohibition, the Cucamonga Valley was the largest wine growing region in the country with over 20,000 acres of vineyards planted, making it larger than Napa and Sonoma Counties combined. In the 1940s, the Cucamonga Valley had 60 wineries and over 35,000 acres of vine. Other historically important wine growing companies in the Cucamonga Valley during the late nineteenth and early twentieth century included the J. Filippi Vintage Company, Galleano Winery and Thomas Vineyards.

Today, most of the vineyard acreage has been lost to industrial and residential development and the urban expansion of nearby Los Angeles and Orange Counties. Today, less than 1,000 vineyard acres remain. The loss of vineyard land continues and some of the nation's oldest vines are threatened. While Cucamonga Valley was largely know for making inexpensive sweet fortified wines, many of the remaining wineries produce red wines, derived mainly from old vines including Alicante Bouschet, Carignane, Cinsault, Grenache, Mission, Mourvedre and Zinfandel.

The project site is not located in a former Rancho, and therefore, was first populated by homesteaders during the last two decades of the nineteenth century. Several of the first homesteaders appeared to be originally associated with the Mormon Colony located in the current area of San Bernardino.[3] The project site was located just southwest of Grapeland, which was a once a small town created in the 1890s centered on grape-growing and wine-making. The Grapeland Irrigation District was designed around a system of internal canals for the transfer of irrigation water from Lytle Creek. Based on historic maps, there were around 16 farms located in the Grapeland and within the project site. By the mid 1890s, the entire project site was part of the Grapeland Irrigation District and was irrigated through the canal system originating in Lytle Creek. The Grapeland Irrigation District lost its water rights in 1900, and the town was abandoned[4]. None of the early farms once located in the project site are extant. However, it is likely that the land was continuously used for viticulture.

Assessor record research previously conducted for CA-SBR-7324H in the Study Area (5916 San Savaine Road; parcel 226-121-7) shows that the property was first assessed in 1915 ($400) while under the ownership of Frank R. Roe, who owned the property up until at least 1942. Trees and vines were first assessed on the property in 1918 ($150), and improvements were first assessed the following year in 1919 ($125). Land assessments increased to $600 in 1923, decreased to $480 in 1933, increased to $720 in 1936. Assessments for vines increased until the late twenties ($750), declined during the early 30s (1930: $500, 1932: $400, 1933:$32), increased in the late thirties (1936, 1937: $480), and decreased in the early 1940s ($210). Assessments for improvements were stable at $120-$125 but doubled to $300 in 1931, and increased to $450 from 1936 to 1942 (McKenna 1995).

It appears that at least part of the project site might have been part of or directly adjacent to the existing Jose Lopez Vineyard, and an adjacent farmstead (CA-SBR-7324H) owned by Frank R. Roe, discussed above, who also cultivated grape vines. Refer to Figure 4, *Resources Map*, in the Cultural Resources Assessment (included as Appendix D to this Draft EIR) for the location of the on-site vineyards and farmstead site. The Jose Lopez Vineyard was planted in 1918 for "packing grapes" to ship to home winemakers in Chicago and

[2] *Leon D. Adams, The Wines of America, (New York: McGraw-Hill) 1985, 399.*

[3] *Jeanette A. Mckenna, A Cultural Resources Reconnaissance Survey of the Westgate Property In the City of Fontana, 1995, 7.*

[4] *Ibid, 8.*

the east. These old Zinfandel vines grow in under harsh conditions; with rocky-sandy soil that holds very little water. After nine decades, they have only grown to about 18 inches tall, and have just a few tiny fist-sized clusters on each vine. Don Galleano's of Galleano Winery manages the land and in 2004 had the vineyard organically certified under the CCOF. The Old Vine Zinfandel grapes from the Lopez Vineyard currently are used to make Carol Shelton's award winning Monga Zin.[5]

(3) Resources Identified Within the Project Site and Immediate Vicinity

(a) Archaeological, Historical, and Paleontological Resources

(i) Methods

PCR conducted a program-level cultural resource assessment of the project site to identify potential impacts to archaeological, historical, and paleontological resources and to develop mitigation measures where appropriate to avoid, reduce, or mitigate potential impacts to cultural resources for the purpose of complying with CEQA and the City's General Plan. The scope of work for this assessment included a cultural resources records search through the California Historical Resources Information System-San Bernardino Archaeological Information Center (CHRIS-SBAIC), a Sacred Lands File (SLF) search through the California Native American Heritage Commission (NAHC) and follow-up Native American consultation (including initiation of consultation pursuant to Senate Bill 18), and a paleontological records search through the San Bernardino County Museum (SBCM). The scope of work also included additional background research and an evaluation of known resources regarding their eligibility for listing in the California Register of Historical Resources, impact evaluations, and the recommendation of mitigation measures to reduce potentially significant impacts to resources to a less than significant level. The detailed methodology and results of these tasks are provided below.

Cultural Resources Records Search

On April 18, 2012, PCR conducted a cultural resource records search at the CHRIS-SBAIC at the SBCM in Redlands, California. The records search included a review of all recorded historical resources and archaeological sites within a half-mile radius of the project site as well as a review of cultural resource reports and historic topographic maps on file. In addition, PCR reviewed the California Points of Historical Interest (CPHI), the California Historical Landmarks (CHL), the California Register of Historical Resources (California Register), the National Register of Historic Places (National Register), and the California State Historic Resources Inventory (HRI) listings. The purpose of the records search is to determine whether or not there are previously recorded archaeological or historical resources within the project site that require evaluation and inclusion in the impact analysis. The results also provide a basis for assessing the sensitivity of the project site for additional and buried resources.

Sacred Lands File Search and Follow-Up Native American Consultation

On May 23, 2012, PCR commissioned a SLF records search and requested a Senate Bill (SB) 18 consultation list from the NAHC. On June 18, 2012, PCR subsequently initiated SB 18 consultation with the Native American groups identified by the NAHC as having affiliation with the project vicinity on behalf of and in coordination with the City. Initial consultation was in the form of a letter sent via certified mail that indicated the project site, briefly described the nature of the Plan, and provided contact information for

[5] *http://www.carolshelton.com/2008-monga-zin (accessed July 26, 2012).*

personnel at the City for consultation inquiries. Results of the SLF search will provide information as to the nature and location of additional prehistoric or Native American resources to be incorporated in the impact analysis whose records may not be available at the CHRIS-SBAIC. The SB 18 consultation will provide the Native American community an opportunity to express their comments on the Plan to the City.

Paleontological Resources Records Search

On April 23, 2012, PCR commissioned a paleontological resources records search of the Vertebrate Paleontology files from the SBCM. This records search entailed an examination of current geologic maps and known fossil localities inside and within the general vicinity of the project site. The purpose of the records search is to determine whether or not there are previously recorded paleontological resources or fossiliferous geologic formations within the project site that require evaluation and inclusion in the impacts analysis. The results also provide a basis for assessing the sensitivity of the project site for additional and buried resources.

Pedestrian Survey

On May 15, 2012, PCR archaeologists and paleontologists conducted a spot-check pedestrian survey of the project site to examine the existing conditions. A full coverage archaeological and paleontological survey was not conducted recognizing that where warranted by level of sensitivity, subsequent more focused environmental review, including full-coverage surveys, would occur as future project-specific development proposals are initiated under the Plan. In addition, PCR revisited known resources within the project site to examine their current condition and content. For areas that were surveyed, the ground surface was examined for archaeological and paleontological resources. A Trimble® GeoXT™ sub-meter Global Positioning System (GPS) unit was used for navigation and documenting distribution of project site conditions. Detailed notes and digital photographs were also taken of the project site and surrounding vicinity.

In July 2011 and June 12, 2012, PCR architectural historians surveyed the project site for potential historical resources, which might include historic buildings and infrastructure, cultural landscapes, and historic agricultural landscapes. PCR revisited known historical resources within the project site to examine their current condition and content.

(ii) Results

Cultural Resources Records Search

Results of the cultural resources records search indicate that 25 cultural resource studies have been conducted within a one-half mile radius of the project site. These studies were conducted from 1990 to 2010 and collectively encompass approximately 35 percent of the one-half mile radius. According to the records search results, approximately 20 percent of the project site has been previously surveyed by an archaeologist. Of the 25 studies, seven encompass approximately 20 percent of the project site. These studies included a monitoring report and six phase I cultural resource assessments.

According to records obtained from the CHRIS-SBAIC, no prehistoric archaeological resources and four historic period resources have been previously recorded within the project site while one historic period resource has been recorded adjacent to the southern boundary of the project site. No prehistoric archaeological resources and 23 historic period resources have been recorded within a half-mile radius of

the project site. The density of historic period resources is higher just outside the one-half mile records search radius where numerous historic districts are located. There are also numerous prehistoric archaeological resources located in the foothills and mountain areas to the north and south of the one-half mile search radius. The five resources (CA-SBR-6901H, CA-SBR-7324H, CA-SBR-9368H, P-36-15,497, P-36-20,137) that have been recorded within the project site and immediate vicinity are described in detail below.[6]

CA-SBR-6901H

CA-SBR-6901H is described as a trapezoidal ditch with cement walls and a large aggregate concrete base. The ditch runs east-west adjacent to and north of Summit Avenue, east of Lytle Creek Road, from at least the Hawker Crawford extending approximately one-mile to about the San Sevain Basins. Based on review of historical maps, aerial photography, and construction technology, the ditch is estimated to date to the first half of the twentieth century (Sutton 1991).

CA-SBR-7342H

CA-SBR-7324H is described as a farmstead located on the west side of San Sevaine Road, north of Highland Avenue, and just south of Summit Avenue. The resource consists of a farmhouse, a garage, a shed, vineyard, trucks, and many other associated features and artifacts. The property appears on a 1938 aerial photograph dating the property to at least the early 1900's (Sutton 1992). Trees and vines were first assessed on the property in 1918, and improvements were first recorded the following year (McKenna 1995).

CA-SBR-9368H

CA-SBR-9368H is described as a residential-sized reservoir located just south of Curtis Road (dirt extension). The reservoir is of pre-1900 construction style and made of granite river cobbles and finished concrete mortar (Shepard 1996).

P-36-15,497 (CPHI-SBR-12)

P-36-15,497 (CPHI-SBR-12) is Baseline Avenue, which is a street running parallel to and between Highland Avenue and Foothill Boulevard extending from Highland in San Bernardino County to as far west as Azusa in Los Angeles County. It is located outside of the project site but adjacent to its southern boundary. The highway was constructed on the Southern California Base Line (which later became known as the San Bernardino Base Line) that was surveyed by Col. Henry Washington in 1853. A monument was erected on the summit of Mount San Bernardino, and a line was laid out going east to west from this point. This line became the basis for land titles being established by California courts (Kaiser 1973). The history of this resource is described in greater detail later in this Section.

[6] *Future pedestrian surveys will also be required to identify if any additional previously unknown resources are located within the project site.*

P-36-20,137

P-36-20,137 is described as a 3.25-mile single track section of the Pacific Electric Railway San Bernardino Line (22 miles overall). This portion of the line lies between Haven Avenue on the west to a point 1,320 feet east of Etiwanda Avenue and was opened in 1914. Currently, all the rails and ties have been removed from the rail-bed with the exception of those rails which cross Rochester and Haven Avenues (White 2004).

Historic Map Review

Other than the resources mentioned above, no resources listed in the CPHI, CHL, California Register, National Register, or the HRI, were identified within the project site. Review of the San Bernardino and Ontario, CA USGS 15-minute topographic quadrangle map from 1954 revealed that there are areas of heavy development within the one-half mile radius and surrounding vicinity when the maps were published. These findings reveal the presence of historic occupation within the immediate area beginning in the early to mid 1900s.

Other Resources – Hippard Ranch

Record search results indicate that one potentially eligible historic resource located is located approximately one-half mile west of the project site. The Hippard Ranch property located at 13181 Victoria Street in Rancho Cucamonga and was designed by Berkeley California Architect, Carr Jones, who is significant in architectural history for his regional variation of the Craftsman Style. The residence is his only southern California project and was constructed largely with materials found on the site. The stone residence has thick arroyo stone walls and thick wood posts. The residence is associated with the surrounding vineyard. The Rancho Cucamonga Historic Preservation Commission surveyed the property in 1987 and determined the property eligible for local listing. The Hippard Ranch is on the west side of I-15 and is not visible from the project site and therefore will not be impacted by the Plan.

Sacred Lands File Search and Follow-Up Native American Consultation

Results of the SLF search through the NAHC *did not* indicate any known Native American cultural resources from the NAHC archives within the project site. In compliance with SB 18 and on behalf of the City, PCR submitted follow-up "request to consult" letters via certified mail on June 18, 2012 to the seven (7) Native American individuals and organizations (including Serrano and Gabrielino contacts) identified by the NAHC as being affiliated with the vicinity of the project site to request any additional information or concerns they may have about Native American cultural resources that may be affected by the Plan.

As of July 25, 2012, PCR has received no responses from the Native American community. PCR will keep the City apprised with this ongoing Native American consultation. The NAHC SLF records search results letter, the Native American contact list, and other Native American consultation documentation is provided in Appendix B of this report.

Paleontological Resources Records Search

Review of records and geologic maps at the SBCM indicate that the project site and its immediate vicinity have no history of fossil resources largely because the majority of the project site consists of Holocene and possibly late Pleistocene fan alluvium, including deposits derived from Etiwanda and Lytle Creeks. The remainder of the project site consists of boulder gravel, which is not conducive to retaining paleontological

resources (Scott 2012). However, according to Scott (2012), these sediments may overlie older Pleistocene alluvium that may have high potential to yield significant fossil remains. Fossils recovered from these older Pleistocene sediments have included mammoths, mastodons, ground sloths, dire wolves, saber-toothed cats, large and small horses, large and small camels, and bison. In particular, SBCM 5.1.13 was encountered approximately one-half mile west of the project site that produced possible fossil remains of wood rat and pocket gopher. SBCM 5.1.8 is the nearest "*bone fide*" paleontological resource from older Pleistocene sediments that is located approximately 10 miles southwest of the project site that produced fossil mammoth remains at about 20 feet below the surface (Scott 2012). The paleontological resources records search results letter is provided in Appendix C of this report.

Pedestrian Survey

No archaeological or paleontological resources were encountered during the spot-check survey. A full coverage archaeological and paleontological survey was not conducted recognizing that subsequent more focused environmental review, including full-coverage surveys, would occur as future project-specific development proposals are initiated under the Plan.

PCR attempted to revisit the four known historic resources (CA-SBR-6901H, CA-SBR-7324H, CA-SBR-9368H, and P-36-20,137) within the project site and one known historic resource adjacent to the project site (P-36-15,497) and discovered that all of the resources except one (Baseline Avenue, P-36-15,497/CPHI-SBR-12) have been destroyed, removed, and/or built over. The majority of the project site has been disturbed by modern development (i.e. paved roads, residential development, commercial uses, etc.) and recent disking and plowing associated with past and current agricultural activities. The ground surface visibility varied from zero to 100 percent throughout the project site.

During the survey, three new historic period resources were identified that have not been formally recorded. These resources included an abandoned water tank, an earthen flood control channel, and the existing vineyards. The resources are described in detail, below.

Water Tank

The water tank is located in the center of the vineyard parcel bounded on the south by N. Frontage Road, on the east by San Sevaine Road, on the west by Cherry Avenue and on the north by E. Summit Avenue. Refer to Figure 4, *Resources Map*, in the Cultural Resources Assessment (included as Appendix D to this Draft EIR) for the location of the water tank. The water tank measures approximately 40 feet in diameter and 20 feet high with 8-inch thick concrete walls. Approximately 10 to 15 feet of the tank walls are sub-grade. Much of the tank floor is obstructed by scattered debris and the interior walls are cracked in many locations and exhibit modern graffiti throughout. This suggests that the water tank has not been in operation for several years. It is likely that the tank once had a roof or cover that no longer exists today. A water tank is depicted on an aerial photograph from 1938 in the same location which suggests that the current tank was constructed prior to this date.[7] It is likely that the water tank was associated with a water system and that once supported cultivation of the vineyards in this area.

[7] *Historicaerials.com; 1938 Aerial Photograph*

Earthen Flood Control Channel

An open earthen channel was identified along the southerly portion of the project site that formerly collected storm flows prior to the completion of the dual concrete channels and the Highland channel immediately to the west. Refer to Figure 4, *Resources Map*, in the Cultural Resources Assessment (included as Appendix D to this Draft EIR) for the location of the earthen flood control channel. The duel concrete channel is operated by the County of San Bernardino Flood Control District and collects seasonal storm flows from the Etiwanda and San Sevaine Creeks to the north. Based on review of historical aerial photographs and topographic maps, the earthen channel was constructed between 1974 and 1980[8] and it has not been utilized for flood control since the construction of the County's duel concrete channel. The earthen channel is currently overgrown with vegetation and measures from 50 to 100 feet wide and traverses approximately 1.5 miles across the southern portion of the project site.

Vineyards

Based on historical research and the apparent age and location of the existing vineyards in the project site, it appears the vineyard may be part of the Jose Lopez Vineyard, planted in 1918, and an adjacent farmstead (CA-SBR-7324H) owned by Frank R. Roe who also cultivated grape vines (see earlier discussion above). The existing vineyard and associated water tank, water system and former farmstead site (CA-SBR-7324H) may meet the significance threshold as a historically significant agricultural resource or cultural landscape.

(4) Eligibility Evaluation of Resources within the Project Site and Immediate Vicinity

(a) Approach

Evaluation of cultural resources is determined by conducting an "evaluation" of a resource's eligibility for listing in the California Register; determining whether it qualifies as a "unique archaeological resource"; and determining whether the resource retains integrity. This is achieved by applying the California Register criteria (including criteria for a "unique archaeological resource" per CEQA) to the resources as listed above under Regulatory Framework.

(b) Resources within the Project Site and Immediate Vicinity

PCR identified three resources within the project site and one resource adjacent to the project site that may potentially be impacted by the Plan. These resources include three built-environment historical resources (P-36-15,497/CPHI-SBR-12 - Baseline Avenue; the water tank; and the earthen flood control channel) and one rural agricultural resource (the early 20th century vineyards). The earthen flood control channel can be ruled out as a potentially eligible resource because it was built between 1974 and 1980[9] and therefore does not meet the 45-year age threshold to be considered an eligible resource. The water tank meets the age threshold to be considered an eligible resource; however, the structure does not meet any of the significance thresholds to be considered a potential individual historical resource on the California Register. However, the water tank may be a contributor to a potentially eligible agricultural landscape due to its use as a likely water source for cultivation of the early 20th century vineyards, as discussed below.

[8] *Historicalaerials.com; 1974 Aerial Photograph, 1980 USGS 7.5' Topographical Quadrangle Map, Fontana, California*

[9] *Ibid.*

(i) Early Twentieth Century Vineyards

Based on historical research and the apparent age and location of the existing vineyard in the north portion of the project site, it appears the vineyard may be part of the Jose Lopez Vineyard, planted in 1918, and an adjacent farmstead (CA-SBR-7324H) owned by Frank R. Roe who also cultivated grape vines. The vineyards, water tank and an associated former farmstead site (CA-SBR-7324H) are physically and historically associated components and may be contributing features of a potential cultural landscape. The identified historic agricultural landscape and its component features are conservatively considered eligible as a historical resource, pursuant to CEQA 15064.5. The period of significance for the historic agricultural resource is from 1918 when grape vine cultivation is first recorded in the Study Area through 1964, the 50-year age threshold for listing in the National Register. Historic vineyards are rapidly becoming a rare property type in the Cucamonga Valley. For the purposes of this investigation, the historic agricultural landscape is conservatively considered eligible under California Register Criterion 1 for its association with the early twentieth-century development of viticulture in the Cucamonga Valley wine growing area, and is assigned a California Historical Resources Status Code of "3CB," appears eligible for listing in the California Register as an individual resource and as a contributor to a California Register eligible district of historic vineyards in the area through a survey evaluation.

(ii) Baseline Avenue (P-36-15,497/CPHI-SBR-12)

Baseline Avenue (P-36-15,497/CPHI-SBR-12) is located outside but immediately adjacent to the southern boundary of the project site. It is a paved road that was constructed on the original Southern California Base Line (which later became known as the San Bernardino Base Line) that traverses east-west from the Initial Point marker that was established by Col. Henry Washington in 1853 near the summit of Mount San Bernardino. A monument currently exists at the original location of the Initial Point marker near the summit of Mount San Bernardino approximately 23 miles east of the project site. In 1853, several years after California became the 31st state, a line was laid out going east to west, known today as the San Bernardino Base Line, and north to south, known today as the San Bernardino Meridian, from this point. These lines became the basis for delineating the new state into a grid system of townships, ranges, and sections. According to Holt (1960):

> *By running guide meridians and standard parallels at intervals of approximately twenty-four miles, an enormous checkerboard of imaginary lines would be superimposed over the state. Each of these squares would then be subdivided into sixteen six-mile-square townships and the townships, in turn, divided into thirty-six one-mile sections, each of which contained 640 acres. Until this could be accomplished, the purchase of land and the assurance of title was risky. (Holt 1960:30)*

As noted by Holt, this grid system would be utilized to determine boundaries of land titles (including the early California Ranchos) that were being established by the courts in early California.

In 1856, Captain Jefferson Hunt, an early Mormon pioneer from San Bernardino, recognized the economic benefits of establishing a more direct route to Los Angeles from San Bernardino. Specifically, Hunt recognized that his wagon freighting business would benefit by supplying wheat, flour, and lumber to the growing population of Los Angeles more efficiently with a more direct route. Prior to the 1850s, the area below the foothills of the San Gabriel Mountains was covered with a dense and impenetrable growth of chaparral. As a result, early travelers, including Hunt's wagons, would choose between a northern and southern route that were both time-consuming. Soon thereafter, Hunt had a road built (that is currently

known as Baseline Avenue) as far as Cucamonga where it joined an existing road. Other pioneers of the San Bernardino Valley, including Joseph Hancock, John Mayfield, and the seven Bemis brothers, participated in the project. The road became less popular after the arrival of the Southern Pacific Railroad in 1874 (Haenszel 1979).

The segment of Baseline Avenue adjacent to the southern boundary of the project site currently exists as a paved six-lane public right-of-way with shoulders, pedestrian sidewalks, and a landscaped center median. No remnants of the original road that was built by Hunt in the 1850s exists today.

Application of California Register Criteria

Baseline Avenue (P-36-15,497) was designated as a CPHI in 1973 (as CPHI-SBR-12, see Kaiser 1973) and is recommended as eligible for listing in the California Register under Criterion 1 for its association with early California land use decisions and property rights that are still in effect today. Baseline Avenue is also recommended as eligible for listing under Criterion 2 for its association with Captain Jefferson Hunt, an early Mormon pioneer who contributed to the early development of the San Bernardino Valley in the 1850s and who played a pivotal role in the development of the original road. As a result, Baseline Avenue is considered a "historical resource" pursuant to CEQA.

Baseline Avenue is not recommended eligible for Criterion 3 and 4 since the original road does not exist today and therefore the resource does not embody the distinctive characteristics of a type, period, or method of construction nor does it yield or have the potential to yield information important to history or prehistory.

(5) Impact Analysis of Resources within the Project Site and Immediate Vicinity

(a) Approach

(i) Archaeological and Historical Resources

The current CEQA Guidelines state that a project will have a significant impact on the environment if it causes a substantial adverse change to a historical resource[10] or damage to a "unique archaeological resource." A substantial adverse change is caused when one or more of the following occurs:

- Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- The significance of a historical resource is materially impaired when a project:
    a. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
    b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section

[10] *A historical resources can be an archaeological object, site or district that is listed in or determined eligible for the California Register*

5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

The *Secretary of the Interior's Standards for Rehabilitation* (Standards) are codified at 36 Code of Federal Regulations (CFR) Section 67.7. In most circumstances, the Standards are relevant in assessing whether there is a substantial adverse change under CEQA. Section 15064.5b(3) of the CEQA Guidelines states in part that ". . . a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource," and therefore may be considered categorically exempt.

(ii) Paleontological Resources

The current CEQA Guidelines state that a project will have a significant impact on the environment if it will "directly or indirectly destroy a unique paleontological resource or site or unique geologic feature."

(b) Resources within the Project Site and Immediate Vicinity

(i) Baseline Avenue (P-36-15,497/CPHI-SBR-12)

Baseline Avenue (P-36-15,497/CPHI-SBR-12) is located outside but immediately adjacent to the southern boundary of the project site and currently exists as a paved six-lane public right-of-way with shoulders, pedestrian sidewalks, and a landscaped center median. No remnants of the original road that was built by Hunt in the 1850s exists today. The Plan will not cause a substantial adverse change to the significance of Baseline Avenue since it is located outside the project site and; therefore, will not be directly impacted by any future development. In addition, the setting of Baseline Avenue has already been altered by existing residential and commercial uses in the area; therefore, no indirect impacts associated with the Plan will occur.

(ii) Other Resources

Based on historical research and the apparent age and location of the existing vineyards in the of the project site, it appears the vineyards may be part of the Jose Lopez Vineyard, planted in 1918, and an adjacent farmstead (CA-SBR-7324H) owned by Frank R. Roe who also cultivated grape vines. The vineyards, water tank and an associated former farmstead site (CA-SBR-7324H) are physically and historically associated components and may be contributing features of a potential historic agricultural landscape which may meet the significance threshold as a historical resource. For the purposes of this DEIR, the identified historic agricultural landscape comprised of the vineyards, water tank, water system, and CA-SBR-7324H is conservatively considered eligible under California Register Criterion 1, for its association with the early twentieth-century development of viticulture in the Cucamonga Valley wine growing region, and is assigned

a California Historical Resources Status Code of "3CB," appears eligible for listing in the California Register as an individual resource and as a contributor to a California Register eligible district of historic vineyards in the area. For the proposed areas of the Plan that will result in future impacts to the vineyards, water tank, water system, and CA-SBR-7324H, recommendations to reduce potential impacts to historical resources are included as mitigation measures, as provided below.

b. Regulatory Framework

(1) State Level

(a) Archaeological and Historical Resources

(i) California Register of Historical Resources

Created by Assembly Bill 2881 which was signed into law on September 27, 1992, the California Register of Historical Resources (California Register) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[11] The criteria for eligibility for the California Register are based upon National Register of Historic Places (National Register) criteria.[12] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.[13]

To be eligible for the California Register of Historical Resources, a pre-historic or historic property must be significant at the local, state, and/or federal level under one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

---

[11] *California Public Resources Code Section 5024.1(a).*

[12] *California Public Resources Code § 5024.1(b).*

[13] *California Public Resources Code § 5024.1(d).*

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places.
- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5.[14]
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

(ii) California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological resources (PRC Sections 21000 et seq.). As defined in Section 21083.2 of the Public Resources Code a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, CEQA Section 15064.5 broadens the approach to CEQA by using the term "historical resource" instead of "unique archaeological resource." The *CEQA Guidelines* recognize that certain archaeological resources may also have significance. The Guidelines recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in Public Resources Code §5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code §5024.1 (g); and (3) any

[14] *Those properties identified as eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, and/or a local jurisdiction register.*

object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of §21084.1 of the Public Resources Code and §15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the Guidelines, then the site is to be treated in accordance with the provisions of Public Resources Code §21083.2, which refer to a unique archaeological resource. The Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. (Guidelines §15064.5(c)(4)).

(b) Paleontological Resources

Paleontological resources are also afforded protection by environmental legislation set forth under CEQA. Appendix G (part V) of the *CEQA Guidelines* provides guidance relative to significant impacts on paleontological resources, stating that "a project will normally result in a significant impact on the environment if it will ...directly or indirectly destroy a unique paleontological resource or site or unique geologic feature."

(2) Local Level—City of Fontana General Plan

(a) Archaeological and Historical Resources

According to the Open Space and Conservation Element (Element) of the City's General Plan, the City Council may designate any improvement, natural feature or site as an historical resource and any area within the City as an historic overlay district if it meets the criteria for listing on the National Register of Historic Places or the following:

- It has a special historical, archeological, cultural, architectural, community or aesthetic value;
- It is identified with persons, a business use or events significant in local, state or national history;
- It embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
- It has a unique location or singular physical characteristic that represents an established and familiar visible feature of a neighborhood or community or the city;
- Its integrity as a natural environment or feature strongly contributes to the well-being of residents or a neighborhood of the city; or
- It is a geographically definable area possessing a concentration of sites, buildings, structures or objects that are unified by past events or are unified aesthetically by plan or physical development. (§5-355, Fontana City Code: Historical Resources Designation Criteria).

Any property that meets one or more of the criteria listed above, falls under the protection of National Historic Preservation Act and/or CEQA. Depending on the nature, significance, integrity, and current condition of the property, the proper form of protection may range from on-site preservation to project

effect mitigation, such as in-depth documentation for historic buildings and data recovery excavation for archaeological sites.

(b) Paleontological Resources

The City's General Plan does not specifically address paleontological resource goals, objectives, or policies.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) Archaeological and Historical Resources

As described above, PCR conducted various archival record searches, historic background research, and a pedestrian survey to identify archaeological and historical resources within the project site and immediate vicinity. In order to determine whether the identified resources qualify as an archaeological or historical resource pursuant to §15064.5 of the CEQA Guidelines, PCR conducted an eligibility evaluation of the four resources (water tank, earthen flood control channel, the vineyards, and Baseline Avenue [P-36-15,497/CPHI-SBR-12]) identified within the project site and immediate vicinity. As result of the evaluation effort, one resource (the earthen flood control channel) is recommended as ineligible for listing in the California Register and does not qualify as "unique archaeological resource" pursuant to CEQA. Therefore, impacts to these resources are not considered a significant impact on the environment and no further analysis is warranted for this resource.

The vineyards and associated water tank, water system and a former farmstead site (CA-SBR-7324H) are physically and historically associated and may be contributing features of a potential cultural landscape. Baseline Avenue (P-36-15,497/CPHI-SBR-12) is recommended as eligible for listing in the California Register under criterion 1 and 2 and is therefore considered a historical resource pursuant to CEQA; however, the proposed project will not cause a substantial adverse change to the resource.

Results of the cultural resources records search indicated that there are no recorded archaeological resources within the project site. PCR performed a limited-coverage pedestrian survey of the project site and did not identify any previously unrecorded archaeological resources. Before an adequate project-level impact analysis can be performed, new comprehensive pedestrian surveys that examine the entirety of the project site will be required to identify any previously unknown archaeological resources. These recommendations are included as mitigation measures below.

(2) Paleontological Resources

To develop a baseline paleontological resources inventory of the project site and surrounding area and to assess the potential paleontological productivity of each stratigraphic unit present, the published and available unpublished geological and paleontological literature was reviewed, as described above; and stratigraphic and paleontological inventories were compiled, synthesized, and evaluated by the staff of the SBCM. These methods are consistent with the Society of Vertebrate Paleontology ("SVP") guidelines for assessing the importance of paleontological resources in areas of potential environmental effect. PCR also conducted a pedestrian survey to identify known resources and/or fossiliferous geological formations within the project site. Since no known paleontological resources were identified on the surface within the project

site, the research described above was conducted in order to assess the potential for the project site to contain buried paleontological resources.

b. Thresholds of Significance

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including cultural resources. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to cultural resources would occur if the project would result in the following:

Threshold 1: Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 (refer to Impact Statement 4.E-1 below);

Threshold 2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 (refer to Impact Statement 4.E-2 below);

Threshold 3: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (refer to Impact Statement 4.E-3 below); or

Threshold 4: Disturb any human remains, including those interred outside of formal cemeteries (refer to Impact Statement 4.E-4 below).

As discussed above, *CEQA Guidelines* Section 15064.5 broadens the approach to CEQA by using the term "historical resource" instead of "unique archaeological resource." If a lead agency determines that an archaeological site is a historical resource, the provisions of §21084.1 of the PRC and §15064.5 of the Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site is to be treated in accordance with the provisions of Public Resources Code §21083.2, which refer to a unique archaeological resource.

c. Analysis of Project Impacts

(1) Historic Resources

Threshold	Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Impact 4.E-1 *Implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. This impact is considered significant and unavoidable, even with mitigation incorporated.*

Results of the cultural resources records search and the pedestrian survey indicated that the nearest recorded historical resource is the Hippard Ranch, which is located approximately one-half mile west of the project site. The Rancho Cucamonga Historic Preservation Commission surveyed the property in 1987 and determined the property eligible for local listing. The Hippard Ranch is on the west side of I-15 and is not visible from the project site and therefore no direct or indirect impacts to the historic resource from any proposed project associated with the Plan would occur.

Baseline Avenue (P-36-15,497/CPHI-SBR-12) is located outside but immediately adjacent to the southern boundary of the project site and currently exists as a paved six-lane public right-of-way with shoulders,

pedestrian sidewalks, and a landscaped center median. No remnants of the original road that was built by Hunt in the 1850s exists today. The proposed project would not cause a substantial adverse change to the significance of Baseline Avenue since it is located outside the project site and; therefore, it would not be directly impacted by any future development. In addition, the setting of Baseline Avenue has already been altered by existing residential and commercial uses in the area; therefore, no indirect impacts associated with the proposed project will occur.

Based on historical research and the apparent age and location of the existing vineyard in the project site, it appears the vineyard may be part of the Jose Lopez Vineyard, planted in 1918, and an adjacent farmstead (CA-SBR-7324H) owned by Frank R. Roe who also cultivated grape vines. The vineyards and associated water tank, water system and a former farmstead site (CA-SBR-7324H) are physically and historically associated components and may be contributing features of a potential historic agricultural landscape. The vineyards and associated water tank, water system and/or former farmstead site may be historically significant, therefore mitigation measures would be required for the preservation and recordation of known resources, and/or recovery and curation of buried resources (see discussion below regarding archaeological resources), as appropriate, in order to address potential impacts. However, even with implementation of applicable mitigation measures that would require recordation of affected resources, impacts to historic resources would be considered significant and unavoidable, as future implementation of the proposed Specific Plan could ultimately result in the demolition and removal of the vineyards and associated water tank, water system and the former farmstead site (CA-SBR-7324H).

(2) Archaeological Resources

Threshold	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact 4.E-2 *Implementation of the proposed project would not a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. This impact is considered less than significant with mitigation incorporated.*

Results of the cultural resources records search indicated that there are no recorded archaeological resources within the project site. PCR performed a limited-coverage pedestrian survey of the project site and did not identify any previously unrecorded archaeological resources. Before an adequate project-level impact analysis can be performed, new comprehensive pedestrian surveys that examine the entirety of the project site will be required to identify any previously unknown archaeological resources and to determine whether there is enough potential to encounter a buried historic archaeological deposit at the former location of CA-SBR-7324H that would warrant subsurface test excavations to identify its nature and extent. These recommendations are included as mitigation measures below.

The Plan could potentially include significant ground-disturbing activities and could therefore have a significant impact on both existing and unidentified archaeological resources within the project site. Relatively limited surface grading would be needed for parking lots, parks, and other improvements requiring low-intensity construction. For the majority of improvements and development, however, such as residential and commercial development, schools, and their associated utilities, deeper and more extensive ground disturbance would be required for construction.

Components of the Plan that do not require excavation activities such as grading, trenching, or boring will result in no impacts to archaeological resources and therefore no additional analyses or mitigation is necessary. These projects would include areas where an existing grade will be utilized or raised to a higher grade. Other Plan components that include excavations into heavily disturbed soils or fill would also result in no impact to archaeological resources as resources have likely been displaced from previous disturbances and there is nearly no potential to encounter resources in fill soils.

However, all components of the Plan that include excavations into native soils will require additional analyses to identify any potential impacts to archaeological resources. The results of the cultural resources records search through the CHRIS-SBAIC revealed that there are numerous archaeological resources located outside the project site but within the foothills and mountain areas to the north and south of the one-half mile search radius. These findings confirm prehistoric occupation in the vicinity of the project and suggest that prehistoric archaeological resource may exist within the project site on the surface or subsurface.

Given the positive results of the records search, the Specific Plan has a moderate potential to impact archaeological resources. Future archaeological sensitivity assessments will be performed on a project-by-project basis and will take into account previous land use/disturbances, project impacts (direct and indirect), and location of known resources in the vicinity. Overall, however, with implementation of applicable mitigation measures, impacts to archaeological resources would be less than significant.

(3) Paleontological Resources

Threshold	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact 4.E-3 *Implementation of the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. This impact is considered less than significant with mitigation incorporated.*

Results of the paleontological resources records search through the SBCM indicated that there are no recorded fossil localities within the project site or within the surrounding vicinity. The nearest paleontological resource from older Pleistocene sediments is located approximately 10 miles southwest of the project site. It is unlikely that shallow excavations associated with the proposed project will encounter these fossiliferous paleontological deposits. However, there is a moderate to high potential to encounter these deposits during deeper excavations. Thus, impacts to paleontological resources are considered potentially significant. However, mitigation measures are provided below to address impacts to paleontological resources. With implementation of applicable mitigation measures, impacts to paleontological resources would be less than significant.

(4) Human Remains

Threshold	Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact 4.E-4 *Implementation of the proposed project would not disturb any human remains, including those interred outside of formal cemeteries. This impact is considered less than significant with mitigation incorporated.*

As discussed earlier, a Sacred Lands File search for the project site requested by PCR from the NAHC in Sacramento failed to indicate the presence of Native American cultural resources in the SLF database within the project site. The NAHC results also noted, however, that the "NAHC [SLF] inventory is not exhaustive and does not preclude the discovery of cultural resources during any project groundbreaking activity." The cultural resources records search through the SBAIC revealed that no recorded human remains have been identified within the project site or a half-mile radius. As a result, the overall sensitivity of the project site with respect to buried human remains appears to be low. If such resources are accidentally encountered during project implementation, mitigation provided below would ensure that potential impacts to the resources are reduced to a less than significant level.

(5) Consistency With Regulatory Framework

The proposed project would comply with all applicable State and federal regulations regarding cultural resources as described above, and therefore no significant impacts regarding conflicts with such laws would result from project implementation. Furthermore, the proposed Specific Plan would not conflict with applicable goals and policies contained in the City's General Plan regarding cultural resources, as discussed below in **Table 4.E-1**, *General Plan Consistency Analysis*. As shown in Table 4.E-1, impacts related to consistency with the Fontana General Plan regarding cultural resources would be less than significant.

Table 4.E-1

General Plan Consistency Analysis

Fontana General Plan Open Space & Conservation Element	
Goal 4.1: The City will seek to identify and inventory all historical and archaeological resources within the City boundaries and its sphere of influence.	
Policy 4.1-1: The City will adopt the necessary means to identify cultural resources within its jurisdiction.	**Not Applicable.** The City's steps to establish a means to identify cultural resources are not applicable to the proposed project.
Policy 4.1-2: The City will consider the identification of cultural resources an integral part of the planning process.	**Not Applicable.** The City's consideration of identifying cultural resources in its planning process is not applicable to the proposed project.
Goal 4.2: The City will encourage and support the preservation, rehabilitation, and/or restoration of historical and archaeological resources within the City boundaries and its sphere of influence.	
Policy 4.2-1: The City will make all reasonable efforts to protect cultural resources under its control.	**Consistent.** The proposed project, with implementation of applicable mitigation measures, will employ reasonable steps to protect on-site cultural resources.
Policy 4.2-2: The City will support incentives, assistance, and opportunities for historic preservation available through federal, state, or City programs.	**Not Applicable.** The City's support for historic preservation assistance is not relevant to the proposed project.
Policy 4.2-3: The City will use its regulatory power to ensure the proper protection of cultural resources and avoid or minimize adverse effects on such resources from private projects that require	**Consistent.** The City will require implementation of applicable mitigation to avoid or minimize adverse effect on cultural resources resulting from the proposed Specific Plan.

Table 4.E-1 (Continued)

General Plan Consistency Analysis

discretionary City actions.	
Goal 4.3: The City will seek to integrate preservation of historical and archaeological resources into economic development strategy.	
Policy 4.3-1: The City will use its historic preservation programs to stimulate community revitalization, redevelopment, job creation, and investment in the community.	**Not Applicable.** The proposed project has no effect on the City's use of historic preservation programs to stimulate community revitalization, redevelopment, job creation, and investment in the community.
Policy 4.3-2: Promote the preservation and rehabilitation of the City's older residential neighborhoods to provide affordable housing.	**Not Applicable.** The proposed project has no effect on the City's preservation and rehabilitation of the City's older residential neighborhoods.
Policy 4.3-3: Apply incentives to encourage compatible development and redevelopment projects in existing residential neighborhoods and commercial districts without sacrificing the integrity of cultural resources.	**Not Applicable.** The proposed project does not include any future development within existing residential neighborhoods or commercial districts that could potentially affect the integrity of cultural resources within those areas.
Goal 4.4: The City will seek to increase public awareness and enjoyment of Fontana's heritage.	
Policy 4.4-1: The City will sponsor, and encourage others to sponsor, public education programs and other activities to disseminate information about Fontana's history and cultural heritage.	**Not Applicable.** The proposed project has no effect on the City's public education programs and other activities to disseminate information about Fontana's history and cultural heritage.
Policy 4.4-2: The City will coordinate efforts to enhance the quality of life in Fontana through historic preservation.	**Consistent.** The proposed project would implement mitigation measures, as necessary, to ensure that impacts to cultural resources as minimized.

4. MITIGATION MEASURES

a. Historical Resources

The historic agricultural landscape comprised of the vineyards, water tank, water system, and CA-SBR-7324H is conservatively considered eligible under California Register Criterion 1, for its association with the early twentieth-century development of viticulture in the Cucamonga Valley wine growing area, and appears eligible for listing in the California Register as an individual resource and as a contributor to a California Register eligible district of historic vineyards in the area. For the proposed areas of the Specific Plan that will result in future impacts to the historic agricultural landscape, the following mitigation measure is recommended:

Mitigation Measure E-1: If the historic agricultural landscape and any associated contributing features including the vineyards, water tank, water system, and farmstead site CA-SBR-7324H would be affected by a future project component of the Plan that would cause a substantial adverse change in the significance of the historical resource, the applicant shall hire a qualified historic preservation consultant to review the Project for conformance with the Secretary of the Interior's Standards, and the preservation

consultant shall provide preservation design consultation to assist the applicant to avoid or reduce potential impacts to historical resources. If potentially significant impacts cannot be avoided, the applicant shall prepare a Historic American Landscapes Survey (HALS) to document the historic agricultural landscape in accordance with the National Parks Service's Requirements for Heritage Documentation Programs. The HALS shall be prepared by a qualified historian or architectural historian and include a discussion of the history of the vineyards and associated structures and infrastructure, historic aerial photographs and written descriptions illustrating the appearance and extent of the vineyards during the historic period, as well as photographs of the remaining landscape and structural features by a Historic American Landscape Survey (HALS)-qualified photographer. Furthermore, the applicant shall preserve a portion of the remaining vineyard within the project boundaries for interpretive purposes, at a size determined appropriate by the City, which shall be located in a publicly accessible area and shall include an interpretive plaque and historic aerial photo or historic map and timeline to educate visitors regarding the past use and significance of the property. If the former farmstead site CA-SBR-7324H would be physically impacted by future ground disturbing activities, the site shall be mitigated through archaeological data recovery by a qualified historical archaeologist prior to commencement of construction activities, as discussed below in Mitigation Measure E-4.

b. Archaeological Resources

For the proposed areas of the Plan that require future excavation activity (e.g. grading, trenching or boring) into native soil, the following mitigation measures are recommended:

Mitigation Measure E-2: The City shall conduct a Phase I Cultural Resources Assessment of the project to identify any archaeological resources within the area of a proposed project component. The Phase I assessment shall include cultural resources records searches through the San Bernardino Archaeological Information Center (as needed), a Sacred Lands File search through the Native American Heritage Commission and follow-up Native American consultation (as needed), and a comprehensive pedestrian survey of the project site. As part of this assessment, the City shall also determine whether there is enough potential to encounter a buried historic archaeological deposit at the former location of CA-SBR-7324H that would warrant subsurface test excavations to identify its nature and extent.

- If resources are identified during the Phase I assessment, then a Phase II assessment shall be required, as described in Mitigation Measure E-2.

- If no resources are identified as part of the assessment, no further analyses or mitigation shall be warranted, unless it can be determined that the project has a high potential to encounter buried archaeological resources. This discussion will be included in a technical report and the Cultural Resources Initial Study or EIR Section.

- If it is determined that there is a moderate or high potential to encounter buried archaeological resources, appropriate mitigation shall be developed and implemented. Appropriate mitigation may include, redesign of the proposed project to avoid the sensitive area, in which case no additional mitigation would be required.

If avoidance is not possible, appropriate mitigation shall include but not be limited to the following:

Archaeological Monitoring During Construction: A qualified archaeologist shall be retained by the City prior to the commencement of the project. The archaeologist shall monitor all ground-disturbing activities and excavations within the project area. The purpose of the monitoring is to inspect sidewalls and spoils piles of exposed excavation trenches and pits for the presence or absence of archaeological resources and to determine whether native soils are present at depth. The frequency of monitoring shall be determined by PCR in coordination with the City and shall be based on the results of the soil conditions and resource yields during construction. Such factors that will determine monitoring frequency include rate of excavation and grading activities, the materials being excavated (fill or native soils), the depth of excavation, and if found, the abundance and type of archaeological resources encountered. In addition, PCR shall recommend appropriate treatment measures (i.e., avoidance, removal, or preservation in place) to reduce or avoid impacts to buried resources, if encountered. If archaeological resources are encountered during implementation of the project, ground-disturbing activities shall temporarily be redirected from the vicinity of the find. The archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment that may include the development and implementation of a testing/data recovery investigation or preservation in place. Upon completion of the monitoring services, the archaeologist shall prepare a final report about the find and the monitoring services to be filed with the City to show satisfactory compliance with the archaeological mitigation measures for a given project. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California Register of Historical Resources. The landowner, in consultation with the City and archaeologist, shall designate repositories to curate any material in the event that resources are recovered during construction.

Mitigation Measure E-3: If resources are identified during the Phase I assessment, a Phase II Cultural Resources Assessment may be warranted if improvements or development is proposed in the vicinity of such resource, or if an alternate alignment or plan is not selected. The Phase II assessment shall evaluate the resource(s) for listing in the California Register of Historical Resources and to determine whether the resource qualifies as a "unique archaeological resource" pursuant to CEQA. If enough data is obtained from the Phase I assessment to conduct a proper evaluation, a Phase II assessment may not be necessary. Methodologies for evaluating a resource can include, but are not limited to: subsurface archaeological excavations, additional background research, and coordination with interested individuals in the community. The methods and results of a Phase II assessment shall be described in a technical report that will support the Initial Study or EIR Section of the CEQA environmental document.

Mitigation Measure E-4: If, as a result of the Phase II assessment, resources are determined eligible for listing in the California Register or are considered "unique archaeological resources," potential impacts to the resources shall be analyzed and if impacts are significant, mitigation measures shall be developed and implemented to reduce impacts to the resources to a level that is less than significant. The preferred mitigation of impacts to archaeological resources shall be avoidance and/or preservation in place such as resource "capping" (capping resource with a layer of clean fill soils before building on resource) or incorporating the resource into a park plan or open space. Preservation in

place or avoidance would provide the least amount of impacts to the resource and would likely meet the interests of individuals or groups who are concerned with impacts to archaeological resources such as Native American groups (if the resource is a prehistoric or Native American resource). If avoidance and/or preservation in place are not feasible, relocation of the resource shall be considered. If these mitigation options are not feasible and/or do not meet the interests of the City or other interested individuals or groups, then a Phase III archaeological assessment shall be implemented. Phase III assessments typically include additional subsurface archaeological excavations (i.e., data recovery) that serve to recover significant archaeological resources before they are damaged or destroyed by the proposed improvement. Phase III assessments shall be considered and implemented as a last resort if no other mitigation measures are feasible. The aforementioned measures are typically recommended as mitigation measures in the CEQA environmental document and are typically implemented after the CEQA environmental document has been certified and prior to issuance of grading or building permits. After the appropriate and feasible mitigation measure(s) has been selected and implemented, the methodology and results of its implementation shall be described in a technical report that shall be submitted to the City to show satisfactory compliance with the archaeological mitigation measures for a given project.

The following mitigation measure applies to all components of the Specific Plan:

Mitigation Measure E-5: If archaeological resources (including historic and prehistoric resources) are encountered during implementation of the project, ground-disturbing activities should temporarily be redirected from the vicinity of the find. The City shall immediately notify a qualified archaeologist of the find. The archaeologist should coordinate with the City as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeologist. Treatment may include the implementation of an archaeological testing or salvage program. All archaeological resources recovered will be documented on California Department of Parks and Recreation Site Forms to be filed with the CHRIS-SBAIC. The archaeologist shall prepare a final report about the find to be filed with the City and the CHRIS-SBAIC, as required by the California Office of Historic Preservation. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the eligibility with respect to the California Register of Historical Resources. The landowner, in consultation with the City and the archaeologist, shall designate repositories to curate any material in the event that resources are recovered during construction. The archaeologist shall also determine the need for archaeological monitoring for any ground-disturbing activities in the area of the find thereafter.

c. Paleontological Resources

The below mitigation measure applies to all components of the Specific Plan:

Mitigation Measure E-6: If construction excavations will reach depths of five feet or greater, a qualified paleontologist shall attend a pre-grading/excavation meeting and develop a paleontological monitoring program for excavations into older Pleistocene-aged Quaternary Alluvium deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the paleontologist during construction excavations below five feet or greater into older Pleistocene-aged Quaternary Alluvium deposits. Monitoring shall

consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered.

Mitigation Measure E-7: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the San Bernardino County Museum or the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository.

Mitigation Measure E-8: The paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant to the lead agency, the San Bernardino County Museum, the Natural History Museum of Los Angeles County, and other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

d. Human Remains

The below mitigation measure applies to all components of the Plan:

Mitigation Measure E-9: If human remains are encountered unexpectedly during implementation of the proposed project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and

confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.

5. CUMULATIVE IMPACTS

Based on available information to date, it appears the proposed project would cause a significant impact to archaeological and historical resources since ground-disturbing activities associated with the Plan has the potential to destroy, damage, or displace surface or previously undiscovered subsurface archaeological and historical resources. Impacts to archaeological and historical resources associated with past, present, and reasonably foreseeable future projects in the vicinity of the project site would be significant since these projects include ground-disturbing activities associated with land development that has the potential to destroy, damage, or displace surface or previously undiscovered subsurface archaeological and historical resources. Therefore, the proposed project, in combination with the identified cumulative projects, would have the potential to result in a significant cumulative impact associated with archaeological and historical resources. Although there are known impacts associated the proposed project that cannot be mitigated to a less than significant level even with the implementation of mitigation measures, as discussed in this EIR section, it can be reasonably assumed that similar mitigation measures (i.e., data recovery, avoidance, documentation and recordation, treatment in accordance with the Secretary of Interior's *Standards*, construction monitoring, etc.) shall be implemented on the identified cumulative projects thus mitigating cumulative impacts to historical and archaeological resources to a less than significant level. However, since the current analysis was programmatic in nature, further project-level analyses are necessary to determine whether there are additional archaeological or historical resources that will be impacted by the proposed project.

In addition, with regard to paleontological resources, it is likely that the majority of related projects in the area would be subject to environmental review and if the potential for significant impacts on paleontological resources is identified, mitigation measures similar to those proposed for the project would be implemented. With implementation of mitigation measures by related projects and the proposed project, cumulative impacts on paleontological resources would be less than significant, and the proposed project's contribution to such impacts would not be considerable.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Historical Resources

Impacts related to historical resources would remain significant and unavoidable, even with implementation of applicable mitigation measures. As such, if the City of Fontana approves the project, the City shall be required to cite their findings in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.

b. Archaeological Resources

With implementation of the mitigation measures above, potentially significant impacts to archaeological resources would be reduced to a less than significant level.

c. Paleontological Resources

With implementation of the mitigation measures above, potentially significant impacts to paleontological resources would be reduced to a less than significant level.

d. Human Remains

With implementation of the mitigation measures above, potentially significant impacts to human remains would be reduced to a less than significant level.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
F. GEOLOGY AND SOILS

1. INTRODUCTION

This section evaluates potential geologic and soils hazards associated with the proposed project including fault rupture, ground shaking, liquefaction, expansive soils, and landform/landslide. A related issue, erosion, is addressed in Section 4.H, *Hydrology and Water Quality*, of this Draft EIR. This section is largely based on information and findings gathered for a Preliminary Geotechnical Evaluation prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore) in May 2012, which is included as Appendix E to this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Regional Geology

The project area is located within the Peninsular Ranges Geomorphic Province of southern California. This geomorphic province encompasses an area that extends approximately 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican border, and beyond another approximately 775 miles to the tip of Baja California. The Peninsular Ranges province varies in width from approximately 30 to 100 miles and is characterized by northwest-trending mountain range blocks separated by similarly trending northwest-trending faults.

The predominant rock type that underlies the Peninsular Ranges province is a Cretaceous age igneous rock (granitic rock) referred to as the Southern California batholith. Older Jurassic- age metavolcanic and metasedimentary rocks and older Paleozoic limestone, altered schist, and gneiss are present within the province. Cretaceous-age marine sedimentary rocks and younger Tertiary-age rocks comprised of volcanic, marine, and non-marine sediments overlie the older rocks. More recent Quaternary sediments, primarily of alluvial origin, comprise the low-lying valley and drainage areas within the region, including the area where the WSP project site is located.

Active northwest-trending fault zones in the Peninsular Ranges province include the San Jacinto fault zone, Elsinore fault zone (Whittier fault), and Newport-Inglewood fault zone. The northern boundary of the province is formed by the Transverse Ranges Southern Boundary fault system. The active San Andreas fault zone is located northeast of the province within the adjacent Colorado Desert Geomorphic Province. The predominant major tectonic activity associated with these and other faults within this regional tectonic framework is right-lateral, strike-slip movement.

(2) Site Geology

The site is located in an alluvial fan/flood plain on gently sloping terrain southwest of the Lytle Creek Wash. Regional geologic maps indicate that the near-surface earth materials underlying the WSP project area consist primarily of young, late-Holocene unconsolidated deposits of sand, gravel and boulders. Areas of un-

compacted, dumped fill soils were observed at the site during our reconnaissance. Artificial fill soils are presumably present in some portions of the site related to prior development of agricultural areas, roadways, utilities, buildings, and other improvements. Surface soils observed in open space portions of the site during reconnaissance by Ninyo & Moore generally consisted of sand with gravel, cobbles and boulders.

(3) Groundwater

The site is located within the northern edge of the Chino groundwater basin. Based on a depth to groundwater contour map of groundwater levels in the fall of 2006, the groundwater depth in the WSP project area is approximately 600 feet deep. Well data from the State Water Resources Control Board GeoTracker website indicate that groundwater levels in the vicinity of the WSP project area are roughly 300 to 400 feet deep. Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. However, shallow perched conditions may be present.

(4) Faulting and Seismicity

(a) Regional Seismicity

The proposed WSP project area is located in a seismically active area, as is the majority of southern California, and the potential for strong ground motion in the project area is considered significant. The active Cucamonga fault is located approximately 2.8 miles northwest of the approximate center of the site, the active San Jacinto fault zone is located approximately 4 miles northeast of the approximate center of the site, and the active San Andreas fault zone is located approximately 9 miles northeast of the approximate center of the site. The site is not located within a State of California Earthquake Fault Zone.

Table 4.F-1, *Principal Regional Active Faults*, below, lists selected principal known active faults within approximately 50 miles of the project area, the maximum moment magnitude (M_{max}) as published by the CGS, and significant historic earthquakes that have occurred on the fault. The faults in Table 4.F-1 are roughly ordered in nearer to farther distance from the approximate center of the project area.

b. Regulatory Framework

(1) State of California

(a) Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy.[1] The Alquist-Priolo Earthquake Fault Zoning Act was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged homes, commercial buildings, and other structures. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault Zoning Act is also intended to provide the citizens with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to

[1] *The Act was originally entitled the Alquist-Priolo Geologic Hazards Zone Act.*

Table 4.F-1

Principal Regional Active Faults

Fault	Maximum Moment Magnitude (M_{max})	Significant Historic Earthquakes
Cucamonga	6.9	-
San Jacinto (San Bernardino)	6.7	Magnitude 6.3 Loma Linda, 7/22/1923
San Andreas (San Bernardino)	7.5	Magnitude 7.9 Fort Tejon, 1/9/1857
Cleghorn	6.5	-
San Jose	6.4	Magnitude 4.7 Upland, 6/28/1988 Magnitude 5.4 Upland, 2/28/1990
Sierra Madre	7.2	-
North Frontal Fault Zone (West)	7.2	-
Chino-Central Avenue (Elsinore)	6.7	-
Elsinore (Glen Ivy)	6.8	Magnitude 6 Elsinore, 5/15/1910
Whittier	6.8	Magnitude 5.9 Whittier Narrows, (Workman Hill fault extension)
Clamshell – Sawpit Canyon	6.5	Magnitude 5.8 Sierra Madre, 6/28/1991
Raymond	6.5	-
Upper Elysian Park (Blind Thrust)	6.4	-
Helendale – S. Lockhart	7.3	-
Verdugo	6.9	-
Hollywood	6.4	-
Newport-Inglewood (L.A. Basin)	7.1	Magnitude 6.4 Long Beach, 3/10/1933
Pinto Mountain	7.2	-
San Gabriel	7.2	-
Lenwood-Lockhart-Old Woman Springs	7.5	-

Source: Ninyo & Moore, 2012

strengthen buildings against ground shaking. The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "earthquake fault zones", around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions.

Maps are distributed to all affected cities and counties for the controlling of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. The State Geologist is charged with continually reviewing new geologic and seismic data, and revising existing zones and delineating additional earthquake fault zones when warranted by new information. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than State law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project that is within an earthquake fault zone can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back. Although setback distances may vary, a minimum 50-foot

setback is required. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey, Special Publications (SP) 42, Fault-rupture Hazard Zones in California.

(b) Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State of California passed the Seismic Hazards Mapping Act of 1990 (Public Resources Code Section 2690-2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of the project site are investigated and appropriate mitigation measures, if any, are incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county shall submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval. Under Public Resources Code Section 2698, nothing is intended to prevent cities and counties from establishing policies and criteria which are stricter than those established by the Mining and Geology Board.

State publications supporting the requirements of the Seismic Hazards Mapping Act include the California Geological Survey SP 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*, and SP 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*. The objectives of SP 117 are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. SP 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the State.

(c) California Building Code

The California Building Code, Title 24 of the California Code of Regulations, is a compilation of building standards, including seismic safety standards for new buildings. California Building Code standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature but not covered by the national model code. Given the State's susceptibility to seismic events, the seismic standards within the California Building Code are among the strictest in the world. The CBC applies to all occupancies in California, except where stricter standards have been adopted by local agencies. California adopted the 2010 California Building Code, which became effective on January 1, 2011. Specific California Building Code building and seismic safety regulations have been incorporated by reference in the Fontana Municipal Code with local amendments.

(d) Unreinforced Masonry Law

The Unreinforced Masonry Law of 1986 requires all cities and counties in Seismic Zone 4 (CBC, 1998) to identify hazardous unreinforced masonry (URM) buildings in their jurisdictions. Owners of such buildings

must be notified of the potential earthquake hazard, and mitigation must be performed. The mitigation method, which may include retrofitting or demolition, is left to the local jurisdiction. The Fontana area lies entirely within Seismic Zone 4. The City of Fontana has identified 85 unreinforced masonry structures in its jurisdiction; all of these are considered non-historic. The City has notified the owners of the buildings, but there are no mitigation measures or standards in place, and mitigation of these structures is not being required or enforced.

(2) City of Fontana

(a) Fontana General Plan Safety Element

The City's General Plan Safety Element, which was adopted in 2003, addresses public safety risks due to natural disasters including seismic events and geologic conditions, as well as sets forth guidance for emergency response during such disasters. The Safety Element also provides maps of designated areas within the City that are considered susceptible to earthquake-induced hazards, such as fault rupture and liquefaction. Notwithstanding, the Department of Building and Safety maintains more detailed mapping than the generalized maps in the Safety Element. These hazards further are discussed below.

(b) Fontana Municipal Code

As stated in Article III, *California Building Code*, of the Fontana Municipal Code formally adopts the CBC with local amendments as the City's Building Code, as noted above. The City Department of Building and Safety is responsible for implementing the provisions of the Fontana Building Code.

3. ENVIRONMENTAL IMPACTS

a. Methodology

This analysis of impacts associated with geology and soils is based on the Preliminary Geotechnical Evaluation prepared by Ninyo & Moore. The Preliminary Geotechnical Evaluation is based on Ninyo & Moore's review of readily available published geotechnical literature and geologic and seismic data pertinent to the proposed project, and site reconnaissance. The references and data reviewed include, but are not limited to, the following:

- Geologic maps and fault maps from the California Geological Survey (CGS) and United States Geological Survey (USGS);
- Topographic maps from the USGS;
- State of California Earthquake Fault Zone Maps;
- State of California Seismic Hazards Zones Reports and Maps;
- A groundwater map from the Chino Basin Watermaster;
- Aerial photographs;
- Seismic data from the CGS and Southern California Earthquake Center; and
- Geotechnical publications by the CGS and USGS.

Recommendations regarding the design and construction of the proposed project are based on these results.

b. Threshold of Significance

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including geology and soils. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to geology and soils would occur if the project would result in one or more of the following:

Threshold 1: 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 Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. A less than significant impact would occur in this regard.);

Threshold 2: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Strong seismic ground shaking (refer to Impact Statement 4.F-1);

Threshold 3: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Seismic-related ground failure, including liquefaction (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. A less than significant impact would occur in this regard.);

Threshold 4: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- Landslides (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 5: Result in substantial soil erosion or the loss of topsoil (refer to Impact Statement 4.F-2);

Threshold 6: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (refer to Impact Statement 4.F-3);

Threshold 7: Be located on expansive soils, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. A less than significant impact would occur in this regard.); or

Threshold 8: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.).

c. Project Design Features

Future development of land uses allowable under the proposed Specific Plan would be subject to applicable codes and regulations, including the California Building Code and Fontana Building Code (local amendments to the CBC), which include provisions for seismic safety in design and construction of structures.

d. Analysis of Project Impacts

(1) Geologic Hazards

(a) Ground Shaking/Seismicity

Threshold	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Impact 4.F-1 Implementation of the proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. This impact is considered less than significant with implementation of applicable mitigation measures.

Earthquake events from one of the regional active or potentially active faults near the project area noted in Table 4.F-1 above could result in strong ground shaking which could affect development within the Specific Plan area. The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The type of construction also affects how particular structures and improvements perform during ground shaking.

In order to evaluate the level of ground shaking that might be anticipated in the project area, site-specific analysis was performed. The 2010 California Building Code recommends that the design of structures be based on the horizontal peak ground acceleration (PGA, measured in terms of "g", the acceleration due to Earth's gravity) having a two-percent probability of exceedance in 50 years, which is defined as the Maximum Considered Earthquake (MCE). The statistical return period for PGAMCE is approximately 2,475 years. Using the USGS (2012) ground motion calculator, the probabilistic PGAMCE for the proposed Specific Plan was calculated as 1.01g at the northeast end of the project area and 0.75g at the southwest end of the project area. The design PGA was estimated to be 0.67g at the northeast end of the project area and 0.50g at the southwest end of the project area using the USGS ground motion calculator. These estimates of ground motion do not include near-source factors that may be applicable to the design of future structures on-site. The higher estimates of ground acceleration at the northeast end of the project area are reflective of the closer proximity to the active Cucamonga fault, San Jacinto fault zone, and San Andreas fault zone, which are located to the north of the project area.

These potential levels of ground shaking could have high impacts on future improvements in the project area without appropriate design mitigation, and should be considered during the detailed design phase of the project. Minimization of the potential impacts of seismic ground shaking can be achieved through proper project structural design, which is required by applicable building codes and seismic safety standards. However, as required by Mitigation Measure F-1 below, structural elements of future improvements would be designed to resist or accommodate appropriate site-specific ground motions and to conform to the current seismic design standards. Appropriate structural design and seismic mitigation techniques would reduce the impacts related to seismic ground shaking to acceptable levels. As such, with implementation of applicable mitigation measures, impacts associated with seismic ground shaking would be less than significant.

(b) Soil Erosion

Threshold	Would the project result in substantial soil erosion or the loss of topsoil?

Impact 4.F-2 Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil. This impact is considered less than significant with implementation of applicable mitigation measures.

Soil erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur in the project area where bare soil is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses.

Review of geologic references and site reconnaissance indicates that surface soils in the Specific Plan area are generally comprised of granular, sandy soils with gravel, cobbles and boulders. Sandy soils typically have low cohesion, and have a relatively higher potential for erosion from surface runoff when exposed in cut slopes or utilized near the face of fill embankments. Surface soils with higher amounts of clay tend to be less erodible as the clay acts as a binder to hold the soil particles together.

Future construction within the project area would result in ground surface disruption during excavation, grading, and trenching that would create the potential for erosion to occur. However, a Storm Water Pollution Prevention Program (SWPPP) incorporating Best Management Practices (BMPs) for erosion control would be prepared prior to the start of construction for each future development project in accordance with governing agencies, including the Santa Ana Regional Water Quality Control Board (RWQCB). Furthermore, the topographic gradients at the project site are relatively gentle, which would also serve to limit surface flow velocities and associated erosion potential.

With the implementation of BMPs incorporated in the project SWPPP during future construction activities, water- and wind-related soil erosion can be limited and managed within construction site boundaries. Examples of these procedures could include surface drainage measures for erosion due to water, such as the use of erosion prevention mats or geofabrics, silt fencing, sandbags and plastic sheeting, and temporary drainage devices. Positive surface drainage would be accommodated at project construction sites to allow surface runoff to flow away from site improvements or areas susceptible to erosion. To reduce wind-related erosion, wetting of soil surfaces and/or covering exposed ground areas and soil stockpiles could be

considered during construction operations, as appropriate. The use of soil tackifiers may also be considered to reduce the potential for water- and wind-related soil erosion.

During long-term operation of future developments in the WSP project area, soil erosion can be mitigated through site drainage design and maintenance practices, as required by the RWQCB as part of a project-specific Water Quality Management Plan (WQMP) for each future development project. Design procedures can be incorporated to reduce soil erosion such as appropriate surface drainage design of roadways and facilities to provide for positive surface runoff. Such design features would serve to reduce concentrated run-off conditions that could cause erosion and affect the stability of project improvements.

Given adherence to erosion control requirements of the RWQCB and implementation of construction-related BMPs and project-specific WQMPs for future development projects within the Specific Plan area, impacts associated with soil instability from wind- and water-borne erosion would be less than significant. Refer to Section 4.H, *Hydrology and Water Quality*, of this Draft EIR for further discussion of impacts related to erosion and surface water quality.

(c) Compressible/Collapsible Soils

Threshold	Would the project result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact 4.F-3 Implementation of the proposed project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. This impact is considered less than significant with implementation of applicable mitigation measures.

As indicated in the proposed project's Initial Study (Appendix A of this Draft EIR), no substantial geologic risks associated with landslides, lateral spreading, subsidence, or liquefaction exist within the project boundaries. However, the project site is characterized by area of compressible soils, which could pose a risk to people or structures on-site. Compressible soils are generally comprised of soils that undergo consolidation when exposed to new loading, such as fill or foundation loads. Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. Buildings, structures and other improvements may be subject to excessive settlement-related distress when compressible soils or collapsible soils are present.

Based on a background review performed by Ninyo & Moore, the project area is underlain by young, sandy alluvial sediments, and some fill soils. The alluvial deposits underlying the site are generally unconsolidated, based on the young nature of the deposits, reflecting a depositional history without substantial loading, and as such may be subject to collapse. Older, undocumented fill soils are also considered potentially compressible or collapsible. Due to the presence of potentially compressible/collapsible soils at the site, there is a potential for differential settlement to cause damage to future project-related improvements. Since future development within the Specific Plan area will involve construction of new improvements that would be loaded upon the existing soils, potential settlement and/or collapsible soils would be a necessary consideration in the detailed design and construction of project improvements. Assessment of the potential for soils prone to settlement would be evaluated prior to detailed design and construction of project improvements and mitigation techniques for each future development would need to be developed, as appropriate, to reduce the impacts related to settlement to low levels. The impacts of settlement are

potentially significant without appropriate mitigation during detailed project design and construction. However, with implementation of applicable mitigation, provided below, impacts related to collapsible and compressible soils would be reduced to less than significant.

(2) Consistency with Applicable Regulations

(a) Alquist-Priolo Earthquake Fault Zoning Act

As previously discussed, the project site is not located within a State-designated Alquist Priolo earthquake fault zone. Therefore, the proposed project would not be subject to special design requirements (i.e., setbacks) or additional studies as required by the Alquist-Priolo Earthquake Fault Zoning Act. The closest known active faults to the site are the Cucamonga Fault and the San Jacinto Fault. The east-west trending Cucamonga Fault is located about ½-mile northwest of the site at its closest point, while the northwest-southeast trending San Jacinto Fault is located approximately two miles to the northeast of the project site at its closest point. Therefore, these faults are not considered to pose a substantial risk to life and property in the area due to surface fault rupture. No active faults have been found within the Specific Plan boundaries. As such, the proposed project would not conflict with the provisions of the Alquist-Priolo Earthquake Fault Zoning Act.

(b) Seismic Hazards Mapping Act

The State of California Seismic Hazards Mapping Program produces maps identifying areas of the State susceptible to liquefaction, but has not yet produced maps for the project area. However, the County of San Bernardino has evaluated generalized areas of liquefaction susceptibility based on areas where potentially loose alluvial soils and shallow groundwater (generally within 50 feet of the ground surface) exist. Based on the Geologic Hazard Overlays of the San Bernardino County Land Use Plan, the project site is not located in an area considered to have susceptibility for liquefaction. Therefore, the potential for liquefaction in the WSP project area is relatively low, and the project would be in compliance with the Seismic Hazards Mapping Act.

(c) Fontana General Plan Safety Element

As noted above, the project site is not located within a City-designated potentially liquefiable area. Furthermore, the future development pursuant to the proposed Specific Plan would comply with the safety guidelines set forth in California Geological Survey SP 117, as applicable, as well as State and local building and safety codes, and preliminary design recommendations set forth in the Preliminary Geotechnical Evaluation for the project. An evaluation of the proposed project's consistency with the applicable goals and policies of the Fontana General Plan Safety Element is presented below in **Table 4.F-2**, *General Plan Consistency Analysis*. As summarized in Table 4.F-2, the project would be in compliance with the Fontana General Plan Safety Element.

(d) Fontana Municipal Code

The proposed project would be designed and constructed in accordance with all Fontana Municipal Code requirements, including those set forth regarding building safety and seismic risks. As such, the project would be in compliance with Fontana Municipal Code requirements.

Table 4.F-2

General Plan Consistency Analysis

Fontana General Plan Safety Element	
Goal/Policy	**Project Consistency Statement**
Goal #1: Injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, earthquake-induced landslides, and other earthquake-induced ground deformation are minimized in our City.	
Policy 1-1: The City shall monitor development or re-development in areas where faults have been mapped through the city.	**Consistent.** No known faults or fault traces have been mapped within the Specific Plan area.
Policy 1-2: The City shall ensure that current geologic knowledge and peer (third-party) review are incorporated into the design, planning, and construction stages of a project, and that site-specific data are applied to each project.	**Consistent.** As required by the City and standard engineering practice, all future development projects will require review and approval of engineering plans that incorporate current geologic and soils data relevant to affected site.
Policy 1-3: The City shall strive to ensure that the design of new structures and the performance of existing structures address the appropriate earthquake hazards.	**Consistent.** Future development would be required to comply with the applicable seismic safety provisions of the California Building Code regarding structural design.
Policy 1-4: The City shall ensure to the fullest extent possible that, in the event of a major disaster, essential structures and facilities remain safe and functional, as required by current law. Essential facilities include hospitals, police stations, fire stations, emergency operation centers, communication centers, generators and substations, and reservoirs.	**Consistent.** While the responsibility of emergency response to major disasters lies with the City and other affected public agencies, the proposed project would not adversely affect the ability of these agencies to adequately respond to such an event.
Policy 1-5: The City shall ensure to the fullest extent possible that, in the event of a major disaster, dependent care and high-occupancy facilities will remain safe.	**Consistent.** While the responsibility of emergency response to major disasters lies with the City and other affected public agencies, the proposed project would not adversely affect the ability of the City to maintain the safety of dependent care and high-occupancy facilities.
Policy 1-6: The City shall ensure that all residents and business owners in the City have access to information regarding seismic hazards.	**Not Applicable.** The proposed project would have no effect on the City's efforts to provide access to information regarding seismic hazards.
Policy 1-7: The City shall continue earthquake strengthening and provisions for alternate or back-up essential services, such as water, sewer, electricity, and natural gas pipelines and connections throughout the city. First priority for this action plan should be for the essential services within or north of the identified fault hazard management zones.	**Not Applicable.** The proposed project would have no effect on the City's efforts regarding earthquake strengthening and provisions for alternate or back-up essential services,

Table 4.F-2 (Continued)

General Plan Consistency Analysis

Fontana General Plan Safety Element	
Goal/Policy	**Project Consistency Statement**
Goal #2: The risk to life or limb, and property damage resulting from geologic hazards is minimized in our City.	
Policy 2-1: The City shall take actions to minimize grading and otherwise changing the natural topography, while protecting public safety and reducing the potential for property damage as a result of geologic hazards.	**Consistent.** Implementation of the proposed Specific Plan would not require extensive grading given the relatively flat topography that characterizes the project site, and as such the potential for property damage from geologic hazards related to slope or topography is minimal.
Policy 2-2: The City shall continue to participate in regional programs designed to protect the groundwater resources and to protect the area from the hazard of regional ground subsidence. Careful management of the regional ground water basin that underlies the area can avoid this hazard.	**Consistent.** The proposed project would not affect the City's participation in programs related to the management of groundwater resources.

Source: PCR Services Corporation, 2014

4. CUMULATIVE IMPACTS

Impacts associated with geologic and soil issues are typically confined to a project site or within a very localized area and do not affect off-site areas associated with the four related projects identified in Chapter 3.0, *Basis for Cumulative Analysis*, or other ambient growth. Cumulative development in the area would, however, increase the overall potential for exposure to seismic hazards by potentially increasing the number of people exposed to seismic hazards. Nevertheless, related projects would be subject to established guidelines and regulations pertaining to seismic hazards. As such, adherence to applicable building regulations and standard engineering practices would ensure that cumulative impacts would be less than significant.

5. MITIGATION MEASURES

Mitigation Measure F-1: To evaluate the potential for direct and secondary effects related to ground shading (including liquefaction, ground settlement, or collapse) to affect the proposed project components, surface reconnaissance and subsurface evaluation shall be performed for each future development. During the detailed design phase of each project, site-specific geotechnical evaluations shall be performed by a qualified geotechnical engineer to assess the settlement potential of the on-site natural soils and undocumented fill. This may include detailed surface reconnaissance to evaluate site conditions, and drilling of exploratory borings or test pits and laboratory testing of soils, where appropriate, to evaluate site conditions. Examples of possible design construction techniques for soils with potential for settlement include removal of the

compressible/collapsible soil layers and replacement with compacted fill; surcharging to induce settlement prior to construction of improvements; allowing for a settlement period after or during construction of new fills; thickened concrete for structural members; additional metal reinforcement for structural members; strengthened structural connections; structural shear walls; flexible connections for utility lines; and specialized foundation design including the use of deep foundation systems to support structures. Varieties of in-situ soil improvement techniques are also available, such as dynamic compaction (heavy tamping) or compaction grouting.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of applicable mitigation measures, adherence to erosion control requirements, and compliance with applicable building codes and seismic safety regulations, potential impacts of the proposed Specific Plan related to geology and soils would be reduced to less than significant levels.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
G. GREENHOUSE GAS EMISSIONS

1. INTRODUCTION

This section describes applicable Federal, State, and local regulations that address greenhouse gas (GHG) emissions and global climate change in California and the City of Fontana. Existing climate conditions and influences on global climate change are also described, and an analysis is provided to assess potential cumulative and project related contributions to global climate change. The analysis accounts for energy and resource conservation measures that have been incorporated into the proposed project and pertinent State mandated GHG emission reduction measures. GHG emission calculations prepared for the proposed project are provided in Appendix F of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. The World Meteorological Organization and United Nations Environmental Program established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The goal of the IPCC is to evaluate the risk of climate change caused by human activities based on peer-reviewed and published scientific literature. The IPCC assesses information (i.e., scientific literature) regarding human-induced climate change, impacts of human-induced climate change, and options for adaptation and mitigation of climate change. The IPCC reports its evaluation through special reports called "assessment reports." The *Fourth Assessment Report*, consisting of three working group reports and a synthesis report based on the first three reports) was published in 2007.[1] In its 2007 report, the IPCC stated that global temperature increases since the mid-20th century was "very likely" attributable to man-made activities (greater than 90 percent certainty).

GHGs are those compounds in the Earth's atmosphere which play a critical role in determining temperature near the Earth's surface. More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Regulated GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Carbon dioxide is the most abundant regulated GHG in the atmosphere. GHGs are the result of both natural and man-made activities, with the primary sources of emissions being transportation, consumption of fossil fuels for power generation, industrial processes, forest fires, decomposition, landfills, and heating and cooking.

[1] *The IPCC's Fourth Assessment Report, http://www.ipcc.ch/.*

Not all GHGs possess the same ability to induce climate change; as a result, GHGs are commonly quantified in the equivalent mass of CO_2, denoted as CO_2e. Mass emissions are calculated by converting pollutant specific emissions to CO_2e emissions by applying the proper global warming potential (GWP) value.[2] The GWP ratios gauge the potency of each GHG's ability to absorb and re-emit low frequency infrared energy. By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons (MT) per year. The CO_2e values are calculated for existing and project build-out conditions in order to generate a net change in GHG emissions for operation. To maintain consistency with U.S. and international practice, The Climate Registry (and the prior California Climate Action Registry) requires participants to use GWPs from the IPCC *Second Assessment Report*.[3]

(1) Greenhouse Gas Inventory

Worldwide man-made emissions of GHGs were approximately 49,000 million metric tons (MMT) of CO_2e annually including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation).[4] Emissions of CO_2 emissions from fossil fuel use accounts for 56.6 percent of the total, while CO_2 emissions from all sources accounts for 76.7 percent of the total. Methane emissions account for 14.3 percent and N_2O emissions for 7.9 percent. The European Commission's Emissions Database for Global Atmospheric Research (EDGAR) reported global emissions of carbon dioxide alone for 2012 at 34,500 MMT, an all-time high. In 2012, the United States was the world's second largest emitter of carbon dioxide at 5,190 MMT (China was the largest emitter of carbon dioxide at 9,860 MMT).[5]

The California Air Resources Board (ARB) compiles GHG inventories for the State of California. Based on the 2012 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 458.7 $MMTCO_2e$ including emissions resulting from imported electrical power and 414.6 $MMTCO_2e$ excluding emissions related to imported power.[6] Between 1990 and 2012, the population of California grew by approximately 7.9 million (from 29.8 to 37.7 million).[7] This represents an increase of approximately 27 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from $773 billion in 1990 to $2.13 trillion in 2012 representing an increase of approximately 176 percent (about two and three-quarter times the 1990 gross state product).[8] Despite the population and economic growth, California's net GHG emissions only grew by approximately 8 percent between 1990 and 2012. The California Energy Commission (CEC) attributes the slow rate of growth to the success of

---

2 *CO_2e was developed by the IPCC, and published in its Second Assessment Report (SAR) 1996.*

3 *The Climate Registry,* General Reporting Protocol*, Version 1.1, (2008) 169.*

4 *Intergovernmental Panel on Climate Change,* Fourth Assessment Report: Synthesis Report*, 2007. Based on the most recent global data from 2004. While more recent data are available from Annex I countries (countries with GHG reductions obligations), Non-Annex I countries (countries without GHG reduction obligations) typically do not have more recent data.*

5 *PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO_2 Emissions 2013 Report, (2013).*

6 *California Air Resources Board, "California Greenhouse Gas 2000-2012 Inventory by Scoping Plan Category - Summary," http://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed August 2014.*

7 *U.S. Census Bureau, "California, Population of Counties by Decennial Census: 1900 to 1990," http://quickfacts.census.gov/qfd/states/06000lk.html. Accessed April 2014; California Department of Finance, "E-5 Population and Housing Estimates for Cities, Counties and the State, January 2011-2014, with 2010 Benchmark," http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php. Accessed August 2014.*

8 *California Department of Finance, "Financial & Economic Data: Gross Domestic Product, California," http://www.dof.ca.gov/HTML/FS_DATA/LatestEconData/FS_Misc.htm. Accessed August 2014. Amounts are based on current dollars as of the date of the report (June 2014).*

California's renewable energy programs and its commitment to clean air and clean energy.[9] **Table 4.G-1**, *State of California Greenhouse Gas Emissions,* identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2012 (i.e., the most recent year in which data are available from the ARB). As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at 36 percent in 2012.

Table 4.G-1

State of California GHG Emissions

Category	Total 1990 Emissions ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2012 Emissions ($MMTCO_2e$)	Percent of Total 2012 Emissions
Transportation	150.7	35%	167.4	36%
Electric Power	110.6	26%	95.1	21%
Commercial	14.4	3%	14.2	3%
Residential	29.7	7%	28.1	6%
Industrial	103.0	24%	89.2	19%
Recycling and Waste[a]	–	–	8.5	2%
High GWP/Non-Specified[b]	1.3	<1%	18.4	4%
Agriculture/Forestry	23.6	6%	37.9	8%
Forestry Sinks	-6.7		–[c]	–
Net Total [d]	**426.6**	**100%**	**458.7**	**100%**

[a] *Included in other categories for the 1990 emissions inventory.*

[b] *High GWP gases are not specifically called out in the 1990 emissions inventory.*

[c] *Revised methodology under development (not reported for 2012).*

[d] *Totals may not add up exactly due to rounding.*

Source: California Air Resources Board, Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, (2007); California Air Resources Board, "California Greenhouse Gas 2000-2012 Inventory by Scoping Plan Category – Summary," http://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed August 2014.

(2) Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties, for example, in predictions of local effects of climate change, occurrence of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC, in its *Fourth Assessment Report*, stated that "it is likely that there has been significant warming due to human activity over the past 50 years."[10] In addition, the *Fourth Assessment Report* holds that the impacts of

[9] *California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004, (2006).*

[10] *Intergovernmental Panel on Climate Change, Fourth Assessment Report, Summary for Policy Makers, (2007).*

future climate change will vary across regions. While "large-scale climate events have the potential to cause very large impacts," the impacts of future climate change will be mixed across regions.[11]

According to ARB, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.[12] Below is a summary of some of the potential effects, reported by an array of studies that could be experienced in California as a result of global warming and climate change:

Air Quality. Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CEC, February 2006).

Water Supply. Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change."[13] For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.[14] Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full.[15] Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.[16]

The California Department of Water Resources report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concludes that "[c]limate change will likely have a significant effect on California's future water resources…[and] future water demand." It also reports that "much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature

[11] *Intergovernmental Panel on Climate Change, Fourth Assessment Report, Summary for Policy Makers.*

[12] *California Environmental Protection Agency, Climate Action Team,* Climate Action Team Report to Governor Schwarzenegger and the Legislature*, (2006).*

[13] Pacific Institute for Studies in Development, Environment and Security, *Climate Change and California Water Resources: A Survey and Summary of the Literature, July, 2003. http://www.pacinst.org/reports/climate_change_and_california_water_resources.pdf*

[14] *Ibid.*

[15] *Ibid.*

[16] *Ibid.*

of future changes is uncertain". It also reports that the relationship between climate change and its potential effect on water demand is not well understood, but "[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future." Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows.[17]

Hydrology. As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of sea water as the oceans warm, and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture. California has a $30 billion agricultural industry that produces half the country's fruits and vegetables. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thus affect their quality.[18]

Ecosystems and Wildlife. Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise 1.0-4.5°F (0.6- 2.5°C) in the next fifty years, and 2.2-10°F (1.4-5.8°C) in the next century, with significant regional variation (USEPA, 2000). In 2009, the California Natural Resources Agency (CNRA) published the *California Climate Adaptation Strategy*[19] as a response to the Governor's Executive Order S-13-2008. In accordance with the *California Climate Adaptation Strategy*, the CEC was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers.[20] The website, known as Cal-Adapt, became operational in 2011.[21] According to the Cal-Adapt website, the project region could result in an average increase in temperature of approximately 6 to 11 percent (about 3.8 to 6.6° Fahrenheit) by 2070–2090, compared to the baseline 1961-1990 period. According to the Cal-Adapt website, these numbers represent a projection of potential future climate scenarios. The data are comprised of the average values from a variety of scenarios and models and is meant to illustrate how the climate may change based on a variety of different potential social and economic factors. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as

[17] *California Department of Water Resources Climate Change Report, Progress on Incorporating Climate Change into Planning and Management of California's Water Resources, July 2006. http://baydeltaoffice.water.ca.gov/climatechange/DWRClimateChangeJuly06_update8-2-07.pdf*

[18] *California Climate Change Center, Our Changing Climate: Assessing the Risks to California, (2006).*

[19] *California Natural Resources Agency, Climate Action Team,* 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*, (2009).*

[20] *California Natural Resources Agency,* 2009 California Climate Adaptation Strategy*, (2009) 9.*

[21] *The Cal-Adapt website address is: http://cal-adapt.org.*

two feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage.[22]

b. Regulatory Framework

(1) Federal Regulations

In 2007, the US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency* that GHGs are air pollutants covered under the Clean Air Act (CAA). Since the United States Environmental Protection Agency (USEPA) is responsible for overseeing compliance with the CAA, emissions of GHGs fall under the jurisdiction of the USEPA, which is therefore obligated to regulate them. As of January 2, 2011, the USEPA requires GHG analyses to be performed as part of permitting requirements for projects which are currently undergoing the permitting process.

On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the Clean Air Act consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

On May 19, 2009, President Obama announced a new Federal policy "aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the United States." The policy proposed fuel efficiency standards that apply to model years 2012 through 2016. Pursuant to this policy, on September 15, 2009, the USEPA and the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) issued a joint proposal to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The proposed standards would be phased in and would require passenger cars and light-duty trucks to comply with a declining emissions standard. By 2016, the vehicles would have to meet an average standard of 250 grams of CO_2 per mile and 35.5 miles per gallon. The final standards were adopted by the USEPA and DOT on April 1, 2010. These standards will result in a reduction of approximately 900 million metric tons of GHGs. In August 2012, standards were adopted for model year 2017 through 2025 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.[23]

[22] *Parmesan, C., 2004. Ecological and Evolutionary Response to Recent Climate Change. Parmesan, C and Galbraith, H, 2004. Observed Ecological Impacts of Climate Change in North America. Arlington, VA: Pew. Cent. Glob. Clim. Change.*

[23] *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," http://www.epa.gov/oms/climate/documents/420f12051.pdf. 2012.*

On September 22, 2009, the USEPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required USEPA to develop "… mandatory reporting of greenhouse gases above appropriate thresholds in all sectors of the economy…" The Reporting Rule applies to most entities that emit 25,000 metric tons of CO_2e or more per year. Starting in 2010, facility owners are required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule would also mandate recordkeeping and administrative requirements in order for USEPA to verify annual GHG emissions reports.

The United States participated in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008–2012 (UNFCCC, 1997). It should be noted that although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments.

In anticipation of providing an updated international treaty for the reduction of GHG emissions, representatives from 170 countries met in Copenhagen in December, 2009 to ratify an updated UNFCCC agreement (Copenhagen Accord). The Copenhagen Accord, a voluntary agreement between the United States, China, India, and Brazil, recognizes the need to keep global temperature rise to below 2°C and obliges signatories to establish measures to reduce greenhouse gas emissions and to prepare to provide help to poorer countries in adapting to climate change (UNFCCC, 2010). The countries met again in Cancun in December, 2010 and adopted the Cancun Agreements, where the nations agreed to recognize country targets, develop low-carbon development plans and strategies, and report inventories annually. In addition, agreements were made regarding financing for developing countries and technology support and coordination among all nations (UNFCCC, 2011).

In December, 2011 the countries met once again, this time in Durban, South Africa, to extend the Kyoto Protocol commitment period for either five or eight years to be voted on at the next. The major outcome of this meeting was the establishment of the Durban Platform for Enhanced Action. This Platform allows negotiation of a new legal and universal emission reduction agreement, which accounts for the mitigation efforts of all countries under one agreement. In addition, all industrialized countries and more than 48 developing countries have reiterated and affirmed their intentions to pursue their emissions reduction pledges made at or after Cancun. Unfortunately, the sum total of official emission reduction pledges received so far amounts to only around 60 percent of what is needed to limit the temperature increase to 2°C above pre-Industrial levels. During 2013–2015 the UNFCCC nations will review the 2°C limit and consider a 1.5°C limit (UNFCCC, 2012)

The United States has opted for a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative.

(2) State Regulations

In response to growing scientific concern regarding global climate change, in the last decade California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State.

(a) California Assembly Bill No. 1493 (AB 1493, Pavley), (Chapter 200, Statutes of 2002)

In September 2002, Governor Gray Davis signed Assembly Bill (AB) 1493 (Pavley), requiring the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. It should be noted that setting emission standards on automobiles is solely the responsibility of the USEPA. The Federal CAA allows California to set state-specific emission standards for automobiles if it first obtains a waiver from the USEPA (other states are then allowed to adopt California's standards). The USEPA initially denied California's request for a waiver, thus delaying the ARB's proposed implementation schedule for setting emission standards on automobiles to help reduce GHGs. In 2009, the USEPA was directed to reexamine its position for denial of California's Clean Air Act waiver and for its past opposition to GHG emissions regulation. California received the waiver on June 30, 2009.

As discussed previously, the USEPA have adopted federal standards for model year 2012 through 2016 light-duty vehicles. In light of the USEPA standards, California – and states adopting California emissions standards – have agreed to defer to the proposed national standard through model year 2016. The 2016 endpoint of the federal and state standards is similar, although the federal standard ramps up slightly more slowly than required under the state standard. The state standards (called the Pavley standards) require additional reductions in CO_2 emissions beyond model year 2016 (referred to as Pavley Phase II standards). As noted above, the USEPA have adopted GHG emission standards for model year 2017 through 2025 vehicles. These standards are slightly different from the Pavley Phase II standards, but the State of California has agreed not to contest these standards, in part due to the fact that while the national standard would achieve slightly less reductions in California, it would achieve greater reductions nationally and is stringent enough to meet state GHG emission reduction goals.[24] On November 15, 2012, ARB approved an amendment that allows manufacturers to comply with the 2017-2025 national standards to meet state law.

(b) Executive Order S-3-05

In June 2005, Governor Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea level. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The order directed the Secretary for the California EPA to report every two years on the State's progress toward meeting the Governor's GHG emission reduction targets. As a result of this Executive Order, the California Climate Action Team (CAT), led by the Secretary of the California EPA, was formed. The CAT is made up of representatives from a number of State agencies and was formed to implement GHG emission reduction programs and report on the progress made toward meeting statewide targets

[24] *California Air Resources Board, "Advanced Clean Cars Summary," http://www.arb.ca.gov/msprog/clean_cars/acc%20summary-final.pdf. Accessed June 2013.*

established under the Executive Order. State agency members include the Business, Transportation and Housing Agency; Department of Food and Agriculture; Resources Agency; Air Resources Board; California Energy Commission; the Public Utilities Commission; and Department of Water Resources. The CAT published its Climate Action Team Report to Governor Schwarzenegger and the Legislature in March 2006, in which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the Executive Order.

(c) California Assembly Bill 32 (AB 32, Nunez) (Chapter 488, Statutes of 2006)

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 enacts into legislation some, but not all, of the 2005 Executive Order targets noted above. In particular, it commits the State to achieving the following:

- 2000 GHG emission levels by 2010; and
  - 1990 levels by 2020, which represents approximately 15.8 percent below "business as usual" (BAU) conditions.[25]

To achieve these goals, AB 32 mandates that ARB establish a quantified emissions cap, institute a schedule to achieve the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. The following schedule outlines the ARB actions mandated by AB 32:

- By January 1, 2008, ARB adopts regulations for mandatory GHG emissions reporting, defines 1990 emissions baseline for California (including emissions from imported power), and adopts it as the 2020 statewide cap. The 2020 emissions cap was set at 427 million metric tons of carbon dioxide equivalents ($MMTCO_2e$).
- By January 1, 2009, ARB adopts plan to effect GHG reductions from significant sources of GHG via regulations, market mechanisms and other actions.[26]
- During 2009, ARB drafts rule language to implement its plan and holds a series of public workshop on each measure (including market mechanisms).
- By January 1, 2010, early action measures will take effect.
- During 2010, ARB, after workshops and public hearings, conducts series of rulemakings to adopt GHG regulations including rules governing market mechanisms.
- By January 1, 2011, ARB completes major rulemakings for reducing GHGs, including market mechanisms. ARB may revise and adopt new rules after January 1, 2011 to achieve the 2020 goal.
- By January 1, 2012, GHG rules and market mechanisms adopted by ARB take effect and become legally enforceable.
  - December 31, 2020 is the deadline for achieving 2020 GHG emissions cap.

[25] *The California Air Resources Board defines "business-as-usual" as emissions in the absence of any greenhouse gas reduction measures discussed in the Climate Change Scoping Plan.*

[26] *The ARB released the Climate Change Proposed Scoping Plan in October 2008, which details the strategies that the State will use to reduce GHG emissions. The Plan was approved at the Board hearing in December 2008.*

ARB's list of discrete early action measures to be adopted and implemented before January 1, 2010 was approved on June 21, 2007, and focused on major statewide contributing sources and industries, not on individual development projects or practices. These early action measures included: (1) a low-carbon fuel standard; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and (3) increased methane capture from landfills.

Recently, ARB released emissions inventory estimates for 2000 through 2009.[27] The inventory shows that as of 2009, transportation was the largest single sector generating carbon dioxide, responsible for 38 percent of the state's total emissions, largely (74 percent) from passenger vehicles. Transportation is followed by industrial emissions, 18 percent; in-state electricity generation, 12 percent; imported electricity, 11 percent; residential and commercial use, 9 percent; agriculture, 7 percent; high global warming potential gases, 4 percent, and recycling and waste, 2 percent. Statewide emissions as a whole, and not individual sectors, are required under AB 32 to meet the 2020 emissions cap.

(d) California Senate Bill 1368 (SB 1368, Perata) (Chapter 598, Statutes of 2006)

A companion bill to AB 32, Senate Bill (SB) 1368, requires the California Public Utilities Commission (PUC) and CEC to establish GHG emission performance standards for the generation of electricity. These standards generally apply to power generated outside California and imported into the State. SB 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting the ARB in meeting its mandate under AB 32. On January 25, 2007, the CPUC adopted an interim GHG Emissions Performance Standard (EPS), which is a facility-based emissions standard requiring all new long-term commitments for baseload generation to serve California consumers to be granted only to power plants with GHG emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour (MW/hr). Further, on May 23, 2007, the CEC adopted regulations that establish and implement an identical EPS of 1,100 pounds of CO_2 per MW/hr (see CEC order No. 07-523-7).

(e) Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)

An additional bill related to AB 32, SB 97 was adopted in August 2007 and requires the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including but not limited to, effects associated with transportation or energy consumption. OPR transmitted these guidelines by the July 1, 2009 deadline, the Resources Agency certified and adopted the guidelines prior to the January 1, 2010 deadline, and the guidelines went into effect in March 2010. The Resources Agency is required to periodically update the guidelines to incorporate new information or criteria established by the ARB pursuant to AB 32.[28] OPR does not identify a threshold of significance for GHG emissions, nor has it prescribed assessment methodologies or specific mitigation measures. The amendments encourage lead agencies to consider many factors when performing a CEQA analysis, but preserve the discretion granted under CEQA to lead agencies to make their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of tiering of programmatic mitigation plans and programs when performing individual project analyses.

[27] *California Environmental Protection Agency, Air Resources Board, "Greenhouse Gas Inventory Data - 2000 to 2009," http://www.arb.ca.gov/cc/inventory/data/data.htm. 2012.*

[28] *Senate Bill No. 97, Chapter 185, approved by Governor Schwarzenegger and filed with the Secretary of State, August 24, 2007.*

(f) Executive Order S-01-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at over 40 percent of statewide emissions. It establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10 percent by 2020. This order also directed ARB to determine if this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early action measure after meeting the mandates in AB 32. The ARB adopted the LCFS on April 23, 2009. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the LCFS became effective on the same day.

(g) Senate Bill 1078 (SB 1078, Sher) (Chapter 516, Statutes of 2002) and Senate Bill 107 (SB 107, Simitian) (Chapter 464, Statutes of 2006) and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Pursuant to Executive Order S-21-09, the California Air Resources Board also was preparing regulations to supplement the Renewables Portfolio Standard (RPS) with a Renewable Energy Standard that will result in a total renewable energy requirement for utilities of 33 percent by 2020. But on April 12, 2011, Governor Jerry Brown signed SB X1-2 to increase California's RPS to 33 percent by 2020. Notably, unlike the prior 20 percent RPS, the current 33 percent RPS applies to Publicly Owned Utilities, such as Southern California Edison.

(h) Title 24, Building Standards Code and CALGreen Code

In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen) which sets performance standards for residential and nonresidential development to reduce environmental impacts and encourage sustainable construction practices. When the CALGreen code went into effect in 2009, compliance through 2010 was voluntary. As of January 1, 2011, the CALGreen code is mandatory for all new buildings constructed in the State. The CALGreen code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.[29] The California Green Building Standards Code was most recently updated in 2013 to include new mandatory measures for residential as well as nonresidential uses; the new measures take effect on January 1, 2014.[30]

(3) Regional Regulations

(a) Southern California Association of Governments

There has also been California legislative activity acknowledging the relationship between land use planning and transportation sector GHG emissions. California SB 375, signed on September 30, 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable

[29] *California 2010 Green Building Standards Code, California Code of Regulations Title 24, Part 11.*

[30] *California Building Standards Commission, 2010 California Green Building Standards Code, (2010).*

Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). SB 375 directed ARB, in consultation with the MPOs, to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. For the Southern California Association of Governments (SCAG), which is the MPO for the region in which the proposed project is located, ARB established per capita reduction targets of 8 percent for 2020 and 13 percent for 2035.[31] Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations. The ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG emission reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

SB 375 also extends the minimum time period for the Regional Housing Needs Allocation (RNHA) cycle from five years to eight years for local governments located within an MPO that meets certain requirements. City or County land use policies (including general plans) are not required to be consistent with the RTP (and associated SCS or APS). However, new provisions of CEQA would incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

In April 2012, SCAG adopted the 2012-2035 RTP/SCS.[32] The RTP/SCS demonstrates GHG reductions that exceed the targets set by ARB by achieving a 9 percent reduction by 2020 and 16 percent reduction by 2035 compared to the 2005 level on a per capita basis. This RTP/SCS also meets criteria pollutant emission budgets set by the USEPA. The reduction in emissions are largely achieved by more sustainable planning, integrating transportation and land use decisions to allow Southern Californians to live closer to where they work and play, and to high-quality transit service.

(b) San Bernardino Association of Governments

The San Bernardino Association of Governments (SANBAG) has developed the *San Bernardino County Regional Greenhouse Gas Reduction Plan* (Reduction Plan).[33] The Reduction Plan provides an inventory of GHG emissions and an evaluation of GHG reduction measures that could be adopted by the 21 Partnership Cities of San Bernardino County, which includes the City of Fontana. The Reduction Plan summarizes the actions that each city has selected in order to reduce GHG emissions, state-mandated actions, GHG emissions avoided in 2020 associated with each local and state action, and each city's predicted progress towards their selected GHG reduction goal. Local GHG reduction measures selected for implementation by the City of Fontana include the following measures as described in the Reduction Plan:

Energy-2, Outdoor Lighting Upgrades for Existing Development: Adopt outdoor lighting standards in the zoning ordinance to reduce electricity consumption above and beyond the requirements of AB 1109. The lighting standards could include the following provisions.

---

[31] *California Air Resources Board (ARB),* Staff Report: Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant To Senate Bill 375*, (2010).*

[32] *Southern California Association of Governments,* 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy, *(2012).*

[33] *San Bernardino Association of Governments, San Bernardino County Regional Greenhouse Gas Reduction Plan, (2013).*

- Encourage lighting along the urban-rural edge, not to exceed one-half the current maximum lighting standard.
- Prohibit continuous all night outdoor lighting in parks, sport facilities, construction sites, and other relevant areas (unless it compromises safety).
    - Implement or exceed CALGreen's nonresidential voluntary mandatory measures related to outdoor lighting controls and equipment (Section A5.209.3) and outdoor lighting (Section A5.209.4), (i.e., achieve CALGreen Tier 1 lighting standards or otherwise demonstrate that energy efficiency of lighting fixtures exceeds mandatory Title 24 by a minimum 15 percent).

Wastewater-2, Energy Efficiency Equipment Upgrades at Wastewater Treatment Plants (Regional): Work with IEUA or other local wastewater treatment provider to upgrade and replace wastewater treatment and pumping equipment with more energy-efficient equipment, as is financially feasible, at the existing facilities by 2020. Require all pumping and treatment equipment to be 25 percent more energy efficient at the time of replacement. Utilize best management practices for the treatment of waste. This measure could also include the following. WWTPs may already have energy efficiency upgrades scheduled as part of their capital improvements program.

Water-4, Senate Bill X7-7 – The Water Conservation Act of 2009: SB X7-7 was enacted in November 2009 and requires urban water agencies throughout California to increase conservation to achieve a statewide goal of a 20 percent reduction in urban per capita use (compared to nominal 2005 levels) by December 31, 2020 (referred to as the "20X2020 goal"). Each urban water retailer in the county subject to the law has established a 2020 per-capita urban water use target to meet this goal.

Transportation (On-Road)-1, SB 375 Sustainable Communities Strategy: SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. While Pavley and LCFS seek to reduce fuel consumed and reduce the carbon content of fuel consumed, SB 375 seeks to reduce VMT through land use planning. SB 375 requires regional transportation plans, developed by MPOs to incorporate an SCS in their RTPs. The goal of the SCS is to reduce regional vehicle miles traveled (VMT) through land use planning and associated transportation patterns. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. The regional GHG reduction target for SCAG is 8 percent by 2020 and 13 percent by 2035, compared to 2005 GHG emissions on a per capita basis. SCAG's 2012–2035 RTP/SCS, if fully implemented would successfully achieve the targets set by ARB.

Transportation (On-Road)-2, "Smart Bus" Technologies (Regional): Collaborate with Omnitrans to implement "Smart Bus" technology, global positioning system (GPS), and electronic displays at all transit stops by 2020 to provide customers with "real-time" arrival and departure time information.[34] Smart Bus Technologies include Automatic Vehicle Location (AVL) systems and real-time passenger information at bus stations. Omnitrans plans to implement these technologies system-wide on all bus routes serving San Bernardino Valley (Omnitrans service area) to enable information sharing, enhance rider services, and attract potential riders. The AVL system has already been implemented. The Bus Arrival Prediction

[34] *These systems not only allow riders to know exactly when the next vehicle will be arriving, but also enable the system operator to track, schedule, and repair vehicles in service. Providing better information to passengers about scheduled arrivals can result in dramatic increases in passengers' perceptions of the service, even if the actual service provided is the same in terms of frequency and on-time arrivals.*

Information System (BAPIS) would be installed in two phases. In Phase I, real-time rider information would be available via text messaging, Quick Response (QR), website, Interactive Voice Response (IVR), and mobile phone devices. Completed implementation is slated for December 2012. In Phase II, Omnitrans will install electronic signs at all major transit hubs and provide General Transit Feed Specification (GTFS) data to the general public to build apps for mobile devices like smartphones and tablet computers. Phase II completion is slated for December 2013. GHG emissions are expected to decrease because the AVL technologies could lead to more fuel-efficient bus operations for Omnitrans and the BAPIS technologies could potentially attract more transit riders who may switch modes from automobiles. Omnitrans' Demand Response Services, OmniLink and Access, do not operate on a fixed schedule or route and are not included in this analysis.

PS-1, GHG Performance Standard for New Development: Individual cities may adopt a GHG Performance Standard for New Development (PS) that would provide a streamlined and flexible program for new residential and nonresidential projects to reduce their emissions. The PS would be a reduction standard for new private developments as part of the discretionary approval process under CEQA. Under the PS, new projects would be required to quantify project-generated GHG emissions and adopt feasible reduction measures to reduce project emissions to a level that is a certain percent below BAU project emissions. The PS does not require project applicants to implement a pre-determined set of measures. Rather, project applicants are allowed to choose the most appropriate measures for achieving the percent reduction goal, while taking into consideration cost, environmental or economic benefits, schedule, and other project requirements. A city may select a suite of other local measures that may already meet the PS-1 percent reduction goal specified by that city. In these cases, a city can still select PS-1 and use it to support those local measures, even though direct reductions from PS-1 for those cities may be zero. An effort was made to not to double-count emissions reductions from PS-1 and overlapping local measures.

(c) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (Basin), which encompasses Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate factors leading to global climate change or GHG emission issues associated with plans and new development projects throughout the Basin. In order to provide GHG emission analysis guidance to the local jurisdictions within the Basin, the SCAQMD has organized a Working Group to develop GHG emission analysis guidance and thresholds.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where the SCAQMD is lead agency, with the goal of achieving a 90 percent emission capture rate. This goal was determined by SCAQMD staff to be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, it was determined that a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. If ARB adopts the statewide significance thresholds, SCAQMD staff will report back to the Board regarding any recommended changes or additions to the SCAQMD's interim stationary source/industrial threshold.

The SCAQMD has not adopted a CEQA significance threshold, interim or otherwise, for GHG emissions associated with residential/commercial development, such as the proposed project.

(4) Local Regulations

The City of Fontana currently follows the adopted Code: California Building Standards Codes, 2010 Edition, known as the California Code of Regulations, Title 24, which consists of:

- The California Building Code, Volumes 1 & 2, based on the 2009 International Building Code;
- The California Residential Code, based on the 2009 International Residential Code; and
- The California Green Building Standards, 2010.

3. PROJECT IMPACTS

a. Methodology

A number of methodologies and significance thresholds have been proposed for analyzing impacts on global climate change. However, at this time no definitive thresholds or methodologies that are applicable to the proposed project have been adopted for determining the significance of the project's cumulative contribution to global climate change in CEQA documents.

For the purposes of this EIR, as will be explained in greater detail below, total GHG emissions from the proposed project were quantified to determine whether the project would be consistent with AB 32 (i.e., reduction of statewide GHG emissions to 1990 levels by 2020). As previously discussed, the mandate of AB 32 demonstrates California's commitment to reducing GHG emissions and the state's associated contribution to climate change, without intending to limit population or economic growth within the state. A particularly illustrative method to determine consistency with AB 32, and one that has the co-benefit of being based on quantification of emissions, is to compare a project's emissions as proposed to that project's emissions if it were to be built under BAU conditions. If a project constitutes an equivalent or larger break from BAU than has been determined by the ARB to be necessary to meet the AB 32 goals for 2020, then that project can be considered consistent with AB 32 and, therefore, will not have a significant impact on the environment due to its GHG emissions.

The Climate Registry (TCR) has prepared the *General Reporting Protocol* for calculating and reporting GHG emissions from a number of general and industry-specific activities.[35] No specific protocols are available for land use projects, so the TCR *General Reporting Protocol* has been adapted to address GHG emissions from the proposed project. The information provided in this section is consistent with the TCR *General Reporting Protocol* minimum reporting requirements. The TCR *General Reporting Protocol* recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).

[35] *The Climate Registry (formerly California Climate Action Registry), General Reporting Protocol Version 3.1, 2009. The protocol was developed under the California Climate Action Registry, which has officially transitioned to The Climate Registry.*

- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.[36]

The ARB believes that consideration of so-called indirect emissions provides a more complete picture of the GHG footprint of a facility: "As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility and provides information" to the ARB to be considered for future strategies by the industrial sector.[37] For these reasons, the ARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, OPR directs lead agencies to "make a good-faith effort, based on available information, to calculate, model, or estimate…GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[38] Therefore, direct and indirect emissions have been calculated for the proposed project.

For purposes of this analysis, it is considered reasonable and consistent with criteria pollutant calculations to consider only those GHG emissions resulting from proposed project-related incremental (net) increase in the use of on-road mobile vehicles, electricity, and natural gas compared to existing conditions. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

Emissions were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model which calculates criteria pollutant and GHG emissions associated with a variety of land use projects. The model was developed in collaboration with the air districts of California including the SCAQMD. CalEEMod incorporates the EMFAC2007 model, which is an emissions estimation model developed by the ARB to calculate emissions from motor vehicles. CalEEMod generates GHG emissions results for CO_2,, CH_4, and N_2O, which are the GHGs associated with and relevant to the proposed project. In CalEEMod, emissions are derived from emission factors published in the *2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories*. These emissions are then converted to units of metric tons of CO_2e ($MTCO_2e$) for consistency. The CO_2e values are calculated for existing and future project build-out conditions in order to generate a net change in GHG emissions for operation (refer to Appendix F of this Draft EIR).

Mobile source emission calculations associated with operation of the proposed project are calculated using the CalEEMod model and an estimated projection of annual VMT, which is derived from the Traffic Study conducted for the project (provided in Appendix F of this Draft EIR). These values account for the daily and seasonal variations in trip frequency and length associated with the project trips. Mobile source emissions also account for residents traveling to and from work and other activities that require a commute. Modeling options are available in the CalEEMod model to account for project design features that reduce vehicular

[36] *Embodied energy includes energy required for water pumping and treatment for end-uses.*

[37] *California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (Assembly Bill 32). Planning and Technical Support Division Emission Inventory Branch, October 19, 2007.*

[38] *OPR Technical Advisory, p. 5.*

trips. Mobile source calculations utilize EMFAC2007 and the California Climate Action Registry (CCAR) *General Reporting Protocol*, Version 3.1 to generate emission factors for CO_2 and CH_4, and N_2O.[39] These emission factors are then applied to the annual VMT calculated in the Traffic Study.

The calculation of emissions is evaluated for the proposed project with the project design features that would reduce GHG emissions, and then compared to the GHG emissions that would occur under a BAU scenario. The BAU scenario assumes operation of comparable amenities (housing, commercial, office, school, etc.) similar in scale and size to serve the regional need. A BAU case does not consider the site-specific benefits or reductions in GHG emissions resulting from co-location of uses, availability of public transportation, project design features, or prescribed mitigation measures. The BAU scenario emissions estimates assume energy and water consumption, emission factors, and GHG emission reduction measures in accordance with the minimum regulatory requirements in place at the time the ARB updated the statewide 2020 GHG emissions projection pursuant to AB 32 using baseline years of 2006 through 2008. Therefore, the BAU scenario is consistent with measures in effect at that time, which include the Pavley Phase I motor vehicle standards and the RPS standard.

Emissions calculations for the project include credits or reductions from project design features and other GHG reducing measures required by CALGreen, such as reductions in water demand. In addition, as mobile source GHG emissions are directly dependent on the number of vehicle trips, a decrease in the number of project generated trips as a result of project features will provide a proportional reduction in mobile source GHG emissions. Projects which locate residential uses near centers of employment would reduce the project's overall VMT as detailed in Appendix F of this Draft EIR.

In addition to mobile source (vehicular) GHG emissions, the CalEEMod model also calculates GHG emissions from sources such as energy usage, water and wastewater usage and solid waste generation. With regards to energy usage, the consumption of fossil fuels to generate electricity and to provide heating and hot water results in GHG emissions. Future fuel consumption rates are based on the project's allowed development, such as the number of dwelling units and square footage of commercial, school, and office space. Energy usage (off-site electricity generation and on-site natural gas consumption) for the proposed project is calculated within CalEEMod using the Residential Appliance Saturation Survey (RASS) and Commercial Building Energy Consumption Survey (CBECS).

Water and waste water generated from the project require energy to supply, distribute and treat. CalEEMod calculates water usage based on the Pacific Institute report, *Waste Not Want Not*.[40] The California Energy Commission's estimate for energy intensity of the water use cycle in southern California is used to calculate the energy usage related to water conveyance. Emission factors from the CCAR *General Reporting Protocol*, Version 3.1 are implemented in calculating the associated GHGs. Because water conveyance associated with the proposed project is regional in nature, the emission factors used in this component of the analysis represent a statewide average of known power producing facilities, utilizing various technologies and emission control strategies.

[39] *The TCR is the successor organization to the CCAR.*

[40] *Gleick, P.H.; Haasz, D.; Henges-Jeck, C.; Srinivasan, V.; Cushing, K.K.; Mann, A. 2003.* Waste Not, Want Not: The Potential for Urban Water Conservation in California*. Published by the Pacific Institute for Studies in Development, Environment, and Security. Full report available online at: http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf . Appendices available online at: http://www.pacinst.org/reports/urban_usage/appendices.htm*

Emissions from solid waste handling generated from the project are also accounted for in the GHG emissions inventory. Waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses was used to estimate the amount of waste generated by the project. GHG emissions from solid waste are calculated based on decomposition of waste into methane based on the USEPA's *AP-42*, Compilation of Air Pollutant Emission Factors.[41]

b. Significance Thresholds

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) published the *California Environmental Quality Act and Climate Change* White Paper, which identified a number of potential approaches for determining the significance of greenhouse gas emissions in CEQA documents. In its White Paper, CAPCOA suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by the lead agency. A potential approach identified in the White Paper, Threshold 1.1, would require a project to meet a percent reduction target. This target would be based on the reduction from BAU emissions identified by the ARB as necessary to satisfy AB 32's mandate of returning to 1990 levels of greenhouse gas emissions by 2020.

The Office of Planning and Research, in its June 19, 2008 Technical Advisory, *CEQA and Climate Change*, recognized that guidelines had not been adopted to provide guidance as to how climate change is to be addressed under CEQA. The Office of Planning and Research provided the following "informal guidance" regarding the following steps for addressing climate change impacts under the California Environmental Quality Act:

- Identify and quantify the greenhouse gas emissions;
- Assess the significance of the impact on climate change; and
- If significant, identify alternatives and/or mitigation measures that will reduce impacts below significance.[42]

In 2009, the Office of Planning and Research transmitted proposed CEQA Guidelines Amendments that were adopted by the Natural Resources Agency. Notably, the Amendments did not establish a threshold of significance for GHGs; instead lead agencies are called on to establish significance thresholds for their respective jurisdictions based on substantial evidence. The CEQA Guidelines Amendments also clarified "that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of California Environmental Quality Act's requirements for cumulative impact analysis."[43] The Natural Resources Agency certified and adopted the guidelines prior to the January 1, 2010 deadline, and the guidelines went into effect in March 2010. Appendix G of the State *CEQA Guidelines* provides sample checklist questions for use in an Initial Study to determine a project's potential for environmental impacts. The most recent amendments relating to climate change and GHG emissions encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead

[41] *USEPA,* AP 42*, Compilation of Air Pollutant Emission Factors, has been published since 1972 as the primary compilation of USEPA's emission factor information. It contains emission factors and process information for more than 200 air pollution source categories. http://www.epa.gov/ttnchie1/ap42/*

[42] *Office of Planning and Research Technical Advisory,* CEQA and Climate Change*, (2008) p. 5.*

[43] *Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources (April 13, 2009).*

agencies in making their own determinations based on substantial evidence. The Guideline Amendments include the following questions, which will serve as significance thresholds for the impact analysis presented below, such that the proposed project would have a significant impact if it would:

Threshold 1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?

Threshold 2: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

CEQA leaves the determination of significance to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects. However, neither the SCAQMD nor the City of Fontana have established specific quantitative significance thresholds for GHG emissions for residential or commercial projects. In the latest CEQA Guidelines Amendments, OPR encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. The City of Fontana has executed a Memorandum of Understanding (MOU) with the San Bernardino Associated Governments (SANBAG) for the preparation of the *San Bernardino County Regional Greenhouse Gas Inventory and Reduction Plan* and related EIR. The plan will provide climate action plans for each participating jurisdiction as individual components of a regional climate action plan, develop regional and local climate action measures, and provide a climate action plan tool to each participating jurisdiction to develop its internal inventory and reduction plan. However, the plan has not been adopted and has not been publicly reviewed and thus cannot yet be relied upon to establish a threshold of significance. The draft plan is anticipated to be released for public review in the fall of 2012.

Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, it is speculative to identify the specific impact, if any, to global climate change from one project's incremental increase in global greenhouse gas emissions. As such, a project's greenhouse gas emissions and the resulting significance of potential impacts are more properly assessed on a cumulative basis. Assessing the significance of a project's contribution to cumulative global climate change involves: (1) determining an inventory of project greenhouse gas emissions; and (2) considering project consistency with applicable emission reduction strategies and goals, such as those set forth by AB 32. As discussed previously in Subsection 2.b., Regulatory Framework, AB 32 establishes GHG reduction targets for statewide emissions. Per AB 32, in 2007, the ARB was required to adopt rules and regulations directing State actions that would achieve GHG emissions equivalent to 1990 (427 $MMTCO_2e$) statewide levels by 2020. To accomplish this, the ARB projected a 2020 GHG emissions forecast which would occur in 2020 if no mitigation actions were taken (i.e., BAU conditions.[44] In the original *Climate Change Scoping Plan* (2008), ARB estimated that the 2020 BAU GHG emissions would be 596 $MMTCO_2e$. Therefore, the emission reduction measures proposed in the Scoping Plan[45] would require a total reduction of 169 $MMTCO_2e$, or a reduction of GHG emissions by 28.4 percent, to enable California to attain the 2020 emissions limit of 427 $MMTCO_2e$. The ARB updated their 2020 GHG emissions BAU estimate based on more recent economic forecasts (i.e., as influenced by the 2007-

[44] *California Air Resources Board, Greenhouse Gas Inventory – Archived 2020 Forecast, http://www.arb.ca.gov/cc/inventory/archive/forecast_archive.htm (accessed October 1, 2012).*

[45] *California Air Resources Board, Climate Change Scoping Plan, December 2008, http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf (accessed October 1, 2012).*

2009 economic downturn) and emission reduction measures in place, replacing its prior 2020 BAU emissions inventory. ARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state's average emissions data from 2006–2008. Specific emission reduction measures included are the million-solar-roofs program, the 33 percent Renewable Energy Portfolio Standard, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the Low Carbon Fuels Standard.[46] The ARB's revised 2020 BAU baseline is 507 $MMTCO_2e$. Therefore, the emission reductions necessary to achieve the 2020 emissions target of 427 $MMTCO_2e$ would be 80 $MMTCO_2e$, or a reduction of GHG emissions by 15.8 percent, below the estimated BAU levels.

Thus, in the absence of a locally adopted threshold, and given the statewide emissions reduction target identified in AB 32, a proposed project would have a significant impact if:

- Project-wide emissions reduction does not constitute a larger break from BAU than has been determined by the ARB to be necessary to meet AB 32's 2020 mandate (15.8 percent).

c. Project Design Features

The proposed project includes project sustainability features that would reduce its GHG emissions compared to a BAU scenario. The following sustainability features result in a reduction in GHG emissions and are proposed as part of the project:

SF-1: By providing jobs near housing, with retail, parks and schools within walking distance of compact residential villages, the Westgate Specific Plan residents will have less reliance on the automobile. This in turn will result in reduced vehicular emissions and an overall healthier community.

SF-2: The Westgate Specific Plan will become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CALGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. Additional updates were adopted in 2013 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2014. By adhering to these regulations, the Westgate Specific Plan will achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CALGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills and install low pollutant-emitting materials. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet designed to ensure that all are working at their maximum capacity and according to their design efficiencies.

[46] *Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 to 2016. Pavley I could potentially result in 27.7 $MMTCO_2e$ reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 $MMTCO_2e$.*

SF-3: In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape in public parks and rights of ways. The Inland Empire Utilities Agency (IEUA) is in the process of building a regional recycled water system to serve the Westgate Specific Plan and others areas in Fontana.

SF-4: The Westgate Specific Plan infrastructure plans include a reclaimed water "purple pipe" system that will be installed as part of the major streets for all medians, parkways and public parks. It would be connected to the IEUA master plan upon its completion.

d. Analysis of Project Impacts

(1) Greenhouse Gas Emissions

Threshold	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?

Impact 4.G-1: Project implementation would result in the increased generation of greenhouse gases; however, implementation of applicable mitigation measures would reduce impacts to less than significant.

The Westgate Specific Plan is expected to be fully operational and occupied in 2035, with completion and occupation of Phase I developments in as early as 2018. The annual GHG emissions for these expected opening years were calculated. AB 32 has not established a GHG reduction goal for 2018, while year 2035 is an interim year between the long-term ARB and SCAG planning horizon years of 2020 and 2050. However, for the purposes of this analysis, the Phase I and full buildout GHG emissions are compared to the AB 32 reduction target for 2020.

Project operational emissions take into account GHG-reducing project features in the quantitative analysis, such as improved location efficiency and reduced water demand as listed above. The level of GHG reductions is based on the CAPCOA guidance, *Quantifying Greenhouse Gas Mitigation Measures*.[47] The CAPCOA guidance provides methodologies for quantifying GHG reductions from a variety of transportation, energy, water, and solid waste measures. According to the CAPCOA guidance, reductions associated with transportation measures is subject to a global maximum reduction based on the location setting of the project. The global maximum reduction establishes the maximum level of reductions that can be claimed even if the sum of the reductions from the individual transportation measures that are applicable to the project exceed the level. The global maximum reduction reflects the highest reduction levels justified by the literature for each location setting classification.[48] The guidance provides criteria for classifying the location setting of a project as urban, compact infill, suburban center, or suburban. According to the guidance, a suburban center is described as:[49]

[47] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, August 2010.*

[48] *Ibid., page 58.*

[49] *Ibid., page 60.*

> *A project typically involving a cluster of multi-use development within dispersed, low-density, automobile dependent land use patterns (a suburb)…The suburban center serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb.*

The proposed project is consistent with the criteria for a suburban center. The CAPCOA guidance states that suburban center locations are typically 20 miles or more from a regional central business district (usually a downtown area) and have a balanced jobs-to-housing ratio, typical building heights of two stories, typical grid street patterns, typical setbacks of 0 to 20 feet, somewhat constrained on-street parking and ample off-street parking, low parking prices (if priced at all), and transit availability with 20 to 30 minute headways. The proposed project is generally consistent with these criteria. The project would be located in excess of 20 miles from downtown Los Angeles and would have a job-to-housing ration of 0.99 at full buildout. The project would generally meet the density criteria such as generally low-rise buildings, grid street patterns, moderate setbacks, and generally available and low cost parking (if priced at all). The project would also be served by bus and Metrolink service with 20 to 30 minute headways. The global maximum reduction for transportation measures for a suburban center project is 20 percent. Based on the included transportation-related project design features, the project would reduce its transportation-related GHG emissions by approximately 12.4 percent below BAU conditions.[50] Detailed information regarding the GHG emissions reductions for the proposed project is provided in Appendix F of this Draft EIR.

The project also includes design features that would reduce its GHG emissions attributable to water supply and conveyance below BAU conditions. The use of water efficient systems, recycled water, and reclaimed water would reduce Phase I water-related GHG emissions by approximately 18 percent and full buildout water-related GHG emissions by approximately 17 percent as compared to the respective BAU scenarios. Detailed information regarding the GHG emissions reductions for the proposed project is provided in Appendix F of this Draft EIR.

As shown in **Table 4.G-2**, *Unmitigated Proposed Westgate Specific Plan Annual Greenhouse Gas Emissions,* the BAU scenario GHG emissions resulting from vehicle, electrical, and natural gas usage associated with operation of Phase I of the Westgate Specific Plan was estimated to be 43,061 $MTCO_2e$ for year 2018 and 156,290 metric tons CO_2e for year 2035. Future operational GHG emissions with GHG-reducing project features implemented for year 2018 and 2035 are shown to be 37,923and 137,825 $MTCO_2e$, respectively. Although implementation of the project would result in an increase in GHG emissions as compared to existing uses (the site is currently largely vacant), the Westgate Specific Plan would result in an overall decrease in emissions when compared to similar development built without incorporation of sustainable strategies (i.e., BAU conditions). The results demonstrate that the GHG-reduction measures that would be included in the project would result in a reduction in total emissions of approximately 12 percent for analysis years 2018 and 2035 compared to a similar development built in accordance with the minimum standards in place before AB 32. However, as shown in Table 4.G-1, the reductions would not meet or exceed the ARB's calculated AB 32 reduction target of 15.8 percent below BAU. Therefore, the project would result in a potentially significant impact with respect to GHG emissions without mitigation. However, mitigation measures are provided below to address this impact.

[50] *According to the Traffic Study, the project is conservatively estimated to result in a 10 percent internal capture rate due to the variety of land uses of the proposed development. As a result, the transportation-related GHG emissions reductions include a 10 percent reduction in VMT attributed to land use and location measures. In accordance with the CAPCOA guidance, Quantifying Greenhouse Gas Mitigation Measures (August 2010), the VMT reduction from land use and location measures is subject to a 10 percent maximum reduction. Therefore, consistent with the CAPCOA guidance, a maximum 10 percent reduction was applied to the land use and location measures category for the project.*

Table 4.G-2

Unmitigated Proposed Westgate Specific Plan Annual Greenhouse Gas Emissions

	CO_2e (Metric Tons/year)			
Emission Source	**Phase I (2018)**	**Phase I BAU (2018)**	**Buildout (2035)**	**Buildout BAU (2035)**
Amortized Construction	454	454	1,814	1,814
Area Sources	464	464	1,659	1,659
Electricity [a]	4,522	4,835	21,014	22,710
Natural gas	1,950	2,478	7,185	9,081
Mobile Sources [b]	29,050	33,154	101,218	115,519
Solid Waste	625	625	2,060	2,060
Water	829	1,051	2,875	3,447
Total	**37,923**	**43,061**	**137,825**	**156,290**
AB-32 Reduction Target [c]	15.8%	–	15.8%	–
Percentage Reduction	**11.9%**	–	**11.8%**	–
Conflicts with Reduction Target?	**Yes**	–	**Yes**	–

[a] *Electricity Usage Rates from CalEEMod default values for Southern California Edison.*

[b] *Mobile source values were derived using CalEEMod and incorporate reductions in vehicle miles traveled from project design features and mitigation measures.*

[c] *Based on the updated ARB BAU estimate of 507 $MMTCO_2e$ by 2020, which requires a reduction of 80 $MMTCO_2e$, or a 15.8 percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 $MMTCO_2e$) by 2020.*

Source: PCR Services Corporation, 2014

(2) Conflicts with Greenhouse Gas Reduction Plans

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?

Impact 4.G-2: Project implementation would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of applicable mitigation measures, this impact would be less than significant.

As noted previously, future development pursuant to the Specific Plan would be required to comply with CalGreen building standards, as well as implement various sustainability features to which the project applicant has committed. These features would foster, among other benefits, reductions in energy consumption, water use, waste generation, and associated pollution. Although the proposed project would introduce new development on the project site, which would generate new air emissions in the area, it is difficult to estimate the amount of new GHG emissions versus existing displaced emissions. Displaced

emissions are those that are created and emitted elsewhere prior to project implementation, whereas new GHG emissions are those that do not and would not exist without implementation of the project, creating a true incremental increase in emissions. The proposed Westgate Specific Plan would provide housing to accommodate the projected increase in demand for housing within the region. Those who would occupy the new residences already generate GHG emissions through their current activities elsewhere, and any net increase in such emissions with their relocation to the site would depend on the nature of their current activities, such as the distance of their commute, the energy demand associated with their current residences, and other factors. Accordingly, it is conservatively assumed that all project-related operational emissions are new. Assuming all project-related operational emissions are new is a conservative approach that likely overstates to some undeterminable extent the amount of any truly "new" emissions.

As indicated above, the proposed project is designed meet the standards of the CALGreen code, including:

- Reducing water consumption by 20 percent, which would be consistent with measure Water-4 of the Reduction Plan requiring urban water agencies throughout California to increase conservation to achieve a statewide goal of a 20 percent reduction in urban per capita use (compared to nominal 2005 levels) by December 31, 2020;
- Diverting 50 percent of construction waste from landfills;
- Installing low pollutant-emitting materials;
- Requiring separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects, which would be consistent with measure Water-4 of the Reduction Plan; and
- Requiring mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet designed to ensure that all are working at their maximum capacity and according to their design efficiencies.

The project features would further reduce GHG emissions. As discussed above, the proposed Westgate Specific Plan would increase the location efficiency and density of the suburban center of the City. The proposed Specific Plan would provide extensive pedestrian network improvements by implementing a multi-faceted trail and walkway plan that links the entire community as well as connects to City wide regional trails. A pedestrian bridge would be constructed to enhance access across Baseline Avenue between the Village of Heritage and the Westgate Specific Plan villages. Sidewalks with landscaped parkways would also be provided. Traffic calming measures that encourage walking or biking, such as marked crosswalks and count-down signal timers, would be installed. In addition, as discussed in Section 4.M, *Traffic-Transportation*, public transit facilities would be provided for all future development projects on-site. As described above, the GHG emissions analysis presented above was performed in accordance with SCAQMD and ARB guidance. Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the project's emissions increase could actually cause a measurable increase in global GHG emissions necessary to influence global climate change. Newer construction materials and practices, current energy efficiency requirements, and newer appliances tend to emit lower levels of air pollutant emissions, including GHGs, as compared to those built years ago, but the net effect is difficult to quantify. Thus, the estimated net increase in emissions resulting from implementation of the proposed project presented above may be an over- or under-estimation. The GHG emissions of the project alone would not likely cause a direct physical change in the environment. It is global emissions in

their aggregate that contribute to climate change, not any one source of emissions alone. Nevertheless, without mitigation, due to the incremental amount of GHG emissions estimated for this project, the proposed Westgate Specific Plan is considered inconsistent with AB 32. However, mitigation measures provided below would address impacts related to consistency with applicable GHG reduction plans.

4. CUMULATIVE IMPACTS

Unlike the cumulative analyses for many topics that address the combined impacts of a proposed project in addition to related projects in a project area, global climate change is affected by a larger range of development activity Although the State requires Metropolitan Planning Organizations and other planning agencies to consider how region-wide planning decisions can impact global climate change, there is currently no established non-speculative method to assess the cumulative impact of proposed independent private-party development projects.

Although AB 32 sets a statewide target for 2020 GHG emissions which equates to approximately 15.8 percent below statewide BAU emissions, the Scoping plan and other implementing tools of the law are clear that the reductions are not expected to occur uniformly from all sources or sectors. The ARB has set targets specific to the transportation sector, for example, and under SB 375 SCAG must incorporate these GHG-reduction goals into the next Regional Transportation Plan (RTP) and demonstrate that its Sustainable Communities Strategies (or alternative planning strategy) is consistent with the Regional Housing Needs Assessment (RHNA). One of the goals of this process is to ensure that the efforts of State, regional and local planning agencies accommodate the contemporaneous increase in population and employment with a decrease in overall GHG emissions. For example, adopting zoning designations that reduce density in areas which are expected to experience growth in population and housing needs is seen as inconsistent with anti-sprawl goals of sustainable planning. Although development under a reduced density scenario results in lower GHG emissions from the use of that land compared to what is currently or hypothetically allowed (e.g., by creating fewer units and fewer attributable vehicle trips), total regional GHG emissions will likely fail to decrease at the desired rate or, worse, increase if regional housing and employment needs of an area are met with a larger number of less-intensive development projects. Therefore, it is not simply a cumulative increase in regional development or the resultant GHG emissions that threatens GHG reduction goals.

The land-use sector can accommodate growth and still be consistent with State-wide plans to reduce GHG emissions. To that end, various agencies are required to develop programs to guide future building and transportation development towards minimized resource consumption and lowered resultant pollution. As discussed above, the City of Fontana has committed to making the proposed Westgate Specific Plan one of the first large scale planned communities in the Inland Empire to meet the State's CALGreen standards. However, the specific options applicable to and chosen by each individual project developer, and their efficacy in reducing GHG emissions, vary widely.

As indicated above, there exist numerous options for project developers to reduce their contribution to city-, county-, and State-wide GHG emissions, while helping to meet the region's future housing, jobs, and infrastructure needs. It is expected that other private development projects would include measures to reduce GHG emissions in compliance with applicable policies. Further, in addition to project specific items, there are CALGreen requirements that apply to all projects; and policies that address larger scale strategies such as reducing GHG emissions from automobiles, use of alternative fuels, performance standards for power plants, etc.

It is not possible at this time to accurately quantify GHG emissions expected from related projects or all of the GHG reductions anticipated from the above-discussed strategies. Because of the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that an emissions increase resulting from the project and related projects could actually cause a measurable increase in global GHG emissions sufficient to force global climate change.

As indicated above, the proposed Westgate Specific Plan would result in a GHG emission profile that reduces emissions approximately 12 percent as compared to BAU for both Phase I and project buildout, which would not meet the AB 32 reduction target of 15.8 percent. The proposed Specific Plan would include numerous project design features to reduce GHG emissions, most notably increased location efficiency and density within the suburban center of the City of Fontana. The proposed Specific Plan would place high density housing within walking distance of employment, commercial/service, and entertainment opportunities. In addition, the project design includes providing pedestrian network improvements and traffic calming measures, expanding the transit network, as well as features that address strategies included in CALGreen for reducing GHG emissions. However, the conclusion remains that the proposed Westgate Specific Plan would not meet AB 32's GHG emissions reduction target of 15.8 percent. Therefore, without mitigation, the proposed Specific Plan's contribution to cumulative GHG emissions would be cumulatively considerable, and the Specific Plan's cumulative impacts would be potentially significant.

5. MITIGATION MEASURES

The following mitigation measures are intended to set forth a program of GHG emission control strategies designed to reduce the proposed Westgate Specific Plan's GHG emissions to the extent feasible during operation.

Mitigation Measure G-1: For future projects, the City shall establish a Westgate Specific Plan Area-wide performance standard of 50 percent of all employees within the Specific Plan Area be eligible for participation in an employee commute trip reduction program. To achieve this standard, future projects with employers of 250 or more employees at a single location are required to implement an employee commute trip reduction program as required by the AQMP. Future projects with employers of less than 250 employees at a single location are required to implement an employee commute trip reduction program that meets the 50 percent eligibility performance standard. The City may waive this requirement for businesses that are extremely small, such as local shops with fewer than 10 employees, etc. to the extent that such a waiver would not conflict with achievement of the performance standard (i.e., eligibility rate of 50 percent of all employees within the Specific Plan Area for participation in an employee commute trip reduction program).[51] Employee commute trip reduction programs shall encompass a combination of individual measures which may include, but are not limited to, the following:

- Provide ride-sharing programs and designate a certain percentage of parking spaces for ride sharing vehicles with adequate passenger loading and unloading and waiting

[51] *According to the U.S. Small Business Administration's, 2012 Small Business Profile for California (see: http://www.sba.gov/sites/default/files/ca12.pdf), approximately 50.4 percent of California's private-sector labor force is employed by businesses of 500 employees or less. Of these businesses, most have fewer than 20 employees. Therefore, it is assumed that the City could waive the employee commute trip reduction program requirement for some projects with extremely small employers, such as local shops with less than 10 employees, and still meet the eligibility rate of 50 percent of all employees within the Specific Plan Area.*

areas for ride-sharing vehicles that minimize on-site circulation impacts and traffic impacts on adjacent roadways;

- Allow telecommuting and alternative work schedules such as staggered start times, flexible schedules, or compressed work weeks;
- Provide employer-sponsored vanpools or shuttles for employee commutes, including purchasing or leasing vans for employee use and subsidizing the cost of vanpool program administration;
- Provide convenient access to bicycle parking facilities;
- Provide information on public or alternative transportation options;
- Provide access to employee break rooms with refrigerators and microwaves; and
- Require regular performance monitoring and reporting by employers to demonstrate achievement, or absence of conflict with achievement, of the Specific Plan Area-wide performance standard.

Mitigation Measure G-2: For future projects, the City shall recommend that schools (K-12) located within the Westgate Specific Plan Area implement a multi-strategy school commute trip reduction program that encompasses a combination of individual measures including, but not limited to, the following:

- Provide a school bus program within each school's service area boundary;
- Implement ride-sharing programs for students, faculty, and staff;
- Provide priority parking for carpools/vanpools; and
- Provide a designated passenger loading and unloading and waiting areas that minimize on-site circulation impacts and traffic impacts on adjacent roadways.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures described above would reduce GHG emissions from operation of the proposed Westgate Specific Plan. As discussed previously, the CAPCOA guidance, *Quantifying Greenhouse Gas Mitigation Measures*,[52] provides methodologies for quantifying GHG reductions from a variety of transportation, energy, water, and solid waste measures. According to the CAPCOA guidance, reductions associated with transportation measures is subject to a global maximum reduction of 20 percent for projects classified with a location setting of suburban center. Based on the included transportation-related project design features and recommended mitigation measures, the project would reduce its transportation-related GHG emissions by 19.8 percent for Phase I operations and slightly greater than 20 percent for buildout operations if the reductions from the individual measures are added together.[53] However, due to the global maximum reduction, the analysis only accounts for a 20 percent reduction from transportation-related GHG emissions. Detailed information regarding the GHG emissions reductions for the proposed project is provided in Appendix F of this Draft EIR. As shown in **Table 4.G-3**, *Mitigated Proposed Westgate Specific Plan Annual*

[52] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, August 2010.*

[53] *For Mitigation Measure G-2, it is assumed that schools in the Westgate Specific Plan area would implement, at a minimum, a school bus program.*

Table 4.G-3

Mitigated Proposed Westgate Specific Plan Annual GHG Emissions

Emission Source	CO_2e (Metric Tons) Phase I (2018)	Phase I BAU (2018)	Buildout (2035)	Buildout BAU (2035)
Amortized Construction	454	454	1,814	1,814
Area Sources	464	464	1,659	1,659
Electricity [a]	4,522	4,835	21,014	22,710
Natural gas	1,950	2,478	7,185	9,081
Mobile Sources [b]	26,590	33,154	92,415	115,519
Solid Waste	625	625	2,060	2,060
Water	859	1,051	2,875	3,447
Total	**35,463**	**43,061**	**129,023**	**156,290**
AB-32 Reduction Target [c]	15.8%	–	15.8%	–
Percentage Reduction	**17.6%**	–	**17.4%**	–
Conflicts with Reduction Target?	**No**	–	**No**	–

[a] *Electricity Usage Rates from CalEEMod default values for Southern California Edison.*

[b] *Mobile source values were derived using CalEEMod and incorporate reductions in vehicle miles traveled from project design features and mitigation measures.*

[c] *Based on the updated ARB BAU estimate of 507 $MMTCO_2e$ by 2020, which requires a reduction of 80 $MMTCO_2e$, or a 15.8 percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 $MMTCO_2e$) by 2020.*

Source: PCR Services Corporation, 2014

Greenhouse Gas Emissions, the project with mitigation would meet and exceed the GHG emissions reduction target percentage of 15.8 mandated by AB 32. Therefore, with the implementation of mitigation measures, operation of the proposed Westgate Specific Plan would result in a less than significant impact with respect to GHG emissions. Furthermore, after mitigation, the project would meet the goals of AB 32 and would not conflict with the State's plans to reduce GHG emissions. The Specific Plan's contribution to cumulative GHG emissions would not be cumulatively considerable, and the Specific Plan's project-level and cumulative impacts would be mitigated to less than significant.

Implementation of the above mitigation measures would also ensure the project is consistent with the GHG reduction goals in the SANBAG Reduction Plan as applicable to the City of Fontana. Mitigation Measure G-1 would reduce VMT associated with development of the Specific Plan by requiring opportunities for employees to rideshare or utilize alternative transportation. This mitigation measure is consistent with the overall intent of the SANBAG Reduction Plan measure, Transportation-1, which seeks to reduce regional VMT through land use planning. Similarly, Mitigation Measure G-2 would reduce VMT associated with development of the Specific Plan by recommending that schools within the Specific Plan area provide school buses, ride-sharing programs for students, staff, and faculty, and encouraging carpooling and vanpooling. The mitigation measure also encourages site design features to reduce unnecessary vehicle idling emissions

by providing dedicated areas for passenger loading and unloading. In total, implementation of these mitigation measures, along with the project design features (discussed previously in subsection 3.c) would result in GHG reductions for development projects in the Specific Plan area consistent with the overall goal of the SANBAG Reduction Plan measure, PS-1, as applicable to the City of Fontana. As implementation of these measures and design features would reduce GHG emissions associated with development of the Specific Plan area to a level consistent with the GHG reduction target for the City, and as implementation of these measures and design features would be generally consistent with the SANBAG Reduction Plan, as applicable to the City of Fontana, impacts after mitigation would be less than significant.

4. ENVIRONMENTAL IMPACT ANALYSIS
H. HAZARDS AND HAZARDOUS MATERIALS

1. INTRODUCTION

This section provides an analysis of potential impacts associated with hazards and hazardous materials that could occur with implementation of the proposed project. The analysis considers the potential impacts associated with the historical uses of the project site, the transport, use, or disposal of hazardous materials that could occur during construction and operation of the project. The analysis also considers potential impacts to the future residents of the project with regard to hazards from materials generated by land uses in the project vicinity. The discussion presented below is based, in part, on the results, conclusions, and recommendations contained in a Hazardous Materials Assessment (HMA) prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants (Ninyo & Moore) in June 2012. The HMA is included as Appendix G to this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Project Site Conditions and Historical Use

The site is currently mostly open space areas that were formerly used for agriculture. Existing commercial developments include the Caltrans Southern Regional Lab complex on the western side of the proposed Westgate Village area, a multi-tenant office building on the western side of the proposed Westgate Center area, and the Falcon Ridge Town Center retail shopping center in the southwest part of the proposed Falcon Ridge Village area. Some paved access roads pass through portions of the project area, while a transmission line corridor with steel lattice transmission towers passes through each of the project study areas, roughly parallel to the I-15 freeway. The open space areas generally contain old vineyards, grassy fields, scattered trees and bushes, unpaved roadways, fencing, and drainage features consisting of both unlined and concrete-lined drainage channels. Piles of dumped materials, including soil, brick and concrete pieces, wood, and other trash and construction debris, were observed in parts of the southeast corner of the proposed Westgate Center Village area along Sierra Lakes Parkway during site reconnaissance.

(2) Groundwater Conditions

The site is located within the northern edge of the Chino groundwater basin. Based on a depth to groundwater contour map of groundwater levels in the fall of 2006, the groundwater depth in the project area is approximately 600 feet deep. Recent well data from the State Water Resources Control Board's GeoTracker website indicate that groundwater is expected to occur at a depth of approximately 300 to 400 feet below ground surface (bgs) and flow in a southerly direction. Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Shallow perched groundwater conditions may also be present.

(3) Oil and Gas Production

The State of California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Wildcat Map W1-4 and Reference K map was reviewed to determine the existence of past or present oil wells within or adjacent to the project study area boundaries. According to Wildcat Map W1-4 and Reference K map, one dry oil well located within one mile of the project study area was identified. The dry hole is identified as "Laurabel 1", which was operated by E. H Brawner, is located approximately 1,363 feet northeast of the Westgate Center portion of the study area. A copy of the Wildcat Map W1-4 and Reference K map are included in Appendix B of the Hazardous Materials Assessment (included as Appendix G of this Draft EIR).

(4) Asbestos-Containing Materials

Asbestos is a strong, naturally occurring, incombustible, and corrosion resistant material, which was used in many commercial products since prior to the 1940's and up until the early 1970's. If inhaled, asbestos fibers can result in serious health problems including lung cancer. Asbestos Containing Materials (ACMs) are building materials containing more than one percent (1%) asbestos (though some state and regional regulators impose a one-tenth of one percent [0.10%] threshold). None of the existing structures present within the project area was built prior to 1978. Therefore, the potential for ACMs on-site is considered very low.

(5) Lead-Based Paint

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, many homes were treated with paint containing some amount of lead. It is estimated that over 80 percent of all housing built prior to 1978 contains some lead-based paint (LBP). The mere presence of lead in paint may not constitute a material to be considered hazardous. In fact, if in good condition (no flaking or peeling), most intact LBP is not considered to be a hazardous material. In poor condition, LBPs can create a potential health hazard for building occupants, especially children. None of the existing structures present within the proposed project site was built prior to 1978. Therefore, the potential for LBPs to be found on-site is considered very low.

(6) Transportation-Related Hazardous Materials

A former Southern Pacific Railroad (SPRR) right-of-way (now a regional bike/multi-use trail) is located along the southwestern boundary of the project area and runs in an east/west direction. Active and inactive railroad beds frequently have concentrations of petroleum products and lead elevated above natural background conditions. Petroleum product concentrations and lead concentrations are derived from drippings from rail vehicles and flaked paint, respectively. Railroad right-of-way areas may include hazardous materials such as metals, total petroleum hydrocarbons (TPH), related compounds (i.e., fuel-related volatile organic compounds) and persistent organochlorine pesticides (i.e., toxaphene, dieldrin, chlordane, and dichloro-diphenyl-trichloroethane [DDT]). Track switch locations often have elevated levels of petroleum hydrocarbons, while inorganic and organic herbicides, along with diesel fuel, may have been used for vegetation control.

In addition, I-15 borders the project area on the west side and the SR-210 corridor traverses across the central portion of the project area in an east/west direction. Aerially deposited lead (ADL) may be encountered within Caltrans right-of-way soil. Until the mid-1980s, gasoline and other fuels contained lead,

a toxic metal. As each car or truck traveled highways and roads, tiny particles of lead were released in the exhaust and settled on the soils next to the road. Typically, lead tends not to move very far or fast in the environment. Caltrans has sampled sediment adjacent to traffic lanes in major metropolitan areas and determined that lead from leaded gasoline emissions is present within these areas. Elevated lead levels have been found to be highest at the surface (zero to six inches) and decreases with depth. Levels are usually highest immediately adjacent to the traveled way and decreases with distance from the road.

(7) Environmental Database Search Results

An environmental database search was performed for Ninyo & Moore by Environmental Data Resources, Inc. (EDR), on May 3, 2012 for the properties within the project area and those properties within 1/8-mile radii of the project area boundaries. A copy of the EDR environmental database report is included as Appendix C of the HMA (Appendix G of this Draft EIR). The following is a summary of the environmental databases searched, their search radii, and the search results. The following provides the results and a discussion of the computerized environmental database searches of state and federal standard environmental records sources and regulatory agency inquiries.

(a) National Priorities List (NPL)

This list identifies hazardous material sites slated for cleanup under the federally sponsored, United States Environmental Protection Agency (EPA) Superfund program. These sites receive remedial funding under the Comprehensive Environmental Response, Compensation and Liability Act.

No properties within the project area or within a one-mile of the project area boundaries were listed on this database. Therefore, National Priorities List (NPL) sites would not be considered an environmental concern for the project site.

(b) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

This list is a federally maintained database and contains data on potentially hazardous waste facilities that have been reported to the EPA by states, municipalities, private companies, and private persons. CERCLIS contains facilities, which are either proposed to or on the NPL, and sites which are in the screening and assessment phase for possible inclusion on this database.

No properties within the project area or within a 1/8-mile radius of the project area boundaries were listed on this database, and therefore not an environmental concern for the project site.

(c) Resource Conservation and Recovery Act (RCRA) – Treatment, Storage, and Disposal (TSD) Properties List

The RCRA TSD database is EPA's comprehensive information system, providing access to data supporting the RCRA of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on facilities which generate, transport, store, treat and/or dispose of hazardous waste as defined by the RCRA. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, dispose of the waste. TSDF facilities treat, store, or dispose of hazardous waste.

No properties within the project area or within a ½-mile radius of the project area boundaries were listed on this database, and therefore not an environmental concern for the project site.

(d) Resource Conservation and Recovery Act (RCRA) Generators List

EPA's RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators List is a compilation by the EPA of properties which generate hazardous waste. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 and 1,000 kg of hazardous waste per month. Conditionally exempt small quantity generators generate less than 100 kg of hazardous waste or 1 kg of acutely hazardous waste per month.

Three properties are listed on this database. The following properties, one within the Falcon Ridge Village study area and two within 1/8-mile of the project area boundaries were listed on this database (one listed as SQG and two listed as LQGs). These properties are not listed on the spills or releases databases. Therefore, it is unlikely that these facilities have impacted the environmental integrity of the project site. The RCRA Generator listings are not considered an environmental concern for the project site.

(e) Emergency Response Notification System

The Emergency Response Notification System is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the United States Coast Guard, the National Response Center, and the Department of Transportation.

No properties within the project area or within a 1/8-mile radius of the project area boundaries were listed on this database.

(f) EnviroStor State NPL and CERCLIS Equivalents

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies facilities that have known contamination or facilities for which there may be reasons to investigate further. The database includes the following types: Federal Superfund sites NPL, State Response (including Military Facilities and State Superfund), Voluntary Cleanup Program; and Schools. EnviroStor provides similar information to the information that was available in CalSites, and provides additional information, including, but not limited to, identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Three properties are listed on this database. One property is located within the Westgate Village East study area, and two properties are located within 1/8-mile of the project area boundaries.

These three facilities have been evaluated or are in the initial stages of evaluation through the DTSC's school evaluation program. Based on information reviewed on the DTSC's EnviroStor website, these facilities would not be considered an environmental concern for the project site.

(g) Leaking Underground Storage Tank (LUST) Lists

The LUST incident reports contain an inventory of reported LUST incidents. This information was obtained from the SWRCB's LUST Information System.

No properties within the project area or within a 1/8-mile radius of the project area boundaries were listed on this database.

(h) State Landfills and/or Solid Waste Disposal Sites

As legislated under the Solid Waste Management and Resource Recovery Act of 1972, the California Integrated Waste Management Board maintains lists of active solid waste disposal sites, inactive or closed solid waste disposal sites, and transfer properties.

One property located within 1/8-mile of the project area boundaries is listed on this database. Etiwanda Disposal Site at Etiwanda (in Rancho Cucamonga), located approximately 1,000 feet west of the Westgate Village study area is listed on this database. This property is a solid waste disposal site for the County of San Bernardino. Ninyo & Moore reviewed records available on the Department of Resources Recycling and Recovery website. Two inspections on July 12 and November 2, 2011 were conducted at the site and no violations or areas of concern were reported. Based on the distance of the Etiwanda Disposal Site to the project study area this facility would not be considered an environmental concern for the project site.

(i) State and Tribal Registered Underground Storage Tanks (USTs)

State and tribal registered storage tank databases were reviewed. This list identifies properties which have historically contained or currently contain registered underground storage tanks (USTs). Listings are related to permitting records and are not necessarily indicative of a release.

Two facilities located within 1/8-mile of the project study area boundaries are listed on this database; however, since the two listings on this database are not listed on the LUST database, these listings would not be considered an environmental concern.

(j) Spills, Leaks, Investigations, and Cleanup (SLIC) Database

The RWQCB maintains reports of properties that have records of SLIC. Three properties (each listed twice) were listed within 1/8-mile of the project area boundaries. The following two properties (each listed twice) located within the project area were listed on the SLIC database.

No properties within the project area or within a 1/8-mile radius of the project area boundaries were listed on this database.

(k) Dry Cleaners

This database is a list of dry cleaners related facilities that have EPA ID numbers. There are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.

One property is listed on this database. Falcon Ridge Cleaners & Shirt Laundry, located at 15218 Summit Avenue, is located within the Falcon Ridge Town Center on the west portion of the Falcon Ridge Village study area. This business is listed as active with a description of "Power Laundries, Family and Commercial". This listing is considered and environmental concern.

(8) Site Reconnaissance

On May 8, 2012, a site reconnaissance was conducted by Mr. Jesus Villanueva of Ninyo & Moore. The reconnaissance involved a tour of the four project study areas: (1) Westgate Village, (2) Westgate Village East, (3) Westgate Center, (4) Falcon Ridge Village, and visual observations of the adjoining properties. Individual property observations and interviews were not conducted at the commercial and retail facilities within the southern portion of the Falcon Ridge Town Center at the Falcon Ridge Village and the western portion of the Westgate Center area.

(a) Polychlorinated Biphenyls (PCBs)

Pole-mounted and pad-mounted transformers were not observed within the project study areas. As such, PCBs are not considered an environmental concern for the project site.

(b) Hazardous Substances

Hazardous substances were not observed within the project study areas, nor were they observed from available public right-of-ways on adjoining properties during the site reconnaissance. Physical evidence of storage or mishandling of hazardous substances was not observed and is not anticipated to be an environmental concern for the project site.

(c) Solid Waste Disposal

Evidence of disposal of hazardous materials, petroleum products or evidence of illegal dumping was not observed within the project study areas with the exception of piles of dumped materials, including soil, brick and concrete pieces, wood, and other trash and construction debris, were observed in parts of the southeast corner of Westgate Center study area along Sierra Lakes Parkway. Solid waste disposal would be considered an environmental concern for the project site.

(d) Additional Observations

Evidence of agricultural use was observed throughout the project area. Historical and potential current use of pesticides on these parcels is considered a potential environmental concern for the project site. High pressure natural gas pipeline post markers were observed on Victoria Street within the northeast portion of the Westgate Village study area and on Frontage Street along the west portion of the Westgate Center study area. A review of the National Pipeline Mapping System website indicates the two high pressure gas lines owned and operated by Southern California Gas runs through each of the project study areas approximately 2,798 feet east and parallel to the I-15 freeway.

A transmission line corridor with steel lattice transmission towers was observed passing through each of the project study areas, roughly parallel to the I-15 freeway.

b. Regulatory Framework

(1) Federal Level

(a) Federal Resource Conservation and Recovery Act (RCRA)

According to the U.S. Environmental Protection Agency (EPA), a "hazardous" waste is defined as one "which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed" (U.S. Public Health and Welfare Code Section 6903). Special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly regulated at both the Federal and State levels. Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public presented by these potential hazards.

The Federal hazardous waste laws are generally contained in the Resource Conservation and Recovery Act (RCRA). These laws provide the "cradle to grave" regulation of hazardous wastes. Businesses, institutions, and other entities that generate hazardous waste are required to identify and track their hazardous waste from the point of generation until it is recycled, reused, or disposed of. The primary responsibility for implementing RCRA is assigned to the EPA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions.

(b) Federal Occupational Safety and Health Act of 1970

The Federal Occupational Safety and Health Act of 1970, which is implemented by the Federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in 29 Code of Federal Regulations (CFR) Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right–to-know.

(2) State Level

(a) Department of Toxic Substances Control

The responsibility for implementation of RCRA was given to the California Department of Toxic Substances Control (DTSC) in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and so regulate a larger number of chemicals. Hazardous wastes regulated by California but not by EPA are called "non-RCRA hazardous wastes."

(b) Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Title 27 of the California Code of Regulations, otherwise known as the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program ("Unified Program"), was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Unified Program is implemented at the local government level by Certified Unified Program Agencies

(CUPAs). The Unified Program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs (Program Elements):

- Hazardous Waste Generation (including on-site treatment under Tiered Permitting);
- Aboveground Petroleum Storage Tanks (only the Spill Prevention Control and Countermeasure Plan [SPCC]);
- Underground Storage Tanks (USTs);
- Hazardous Material Release Response Plans and Inventories;
- California Accidental Release Prevention Program (Cal ARP); and
- Uniform Fire Code Hazardous Material Management Plans and Inventories.

The CUPA with jurisdiction over the City of Fontana is the San Bernardino County Department of Health Services (DHS). Permits for USTs in the City are filed with the County Department of Public Works, Waste Management Division.

(c) Accidental Release Prevention Law

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities.

Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the CUPA and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Risk Management Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

(d) Transportation of Hazardous Materials/Wastes

Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between federal, State and local governmental authorities and private persons through a State-mandated Emergency Response Plan.

Due to the significant short-term risks to public health and the environment associated with hazardous waste management during transportation of wastes, specific Commercial Hazardous Waste Shipping Routes

are designated with the intent of minimizing the distance that wastes are transported and the proximity to vulnerable locations.

(e) Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

(f) Safe Drinking Water and Toxic Enforcement Act

The Safe Drinking Water and Toxic Enforcement Act (22 CCR sec. 12000 et seq.), better known as Proposition 65, lists chemicals and substances believed to have the potential to cause cancer or deleterious reproductive effects in humans, restricts the discharges of listed chemicals into known drinking water sources at levels above the regulatory levels of concern, requires public notification of any unauthorized discharge of hazardous waste, and requires that a clear and understandable warning be given prior to a known and intentional exposure to a listed substance.

(g) Oil and Gas Fields

The California Division of Oil, Gas and Geothermal Resources (DOGGR) is the State agency responsible for the oversight of drilling, operation, maintenance, plugging and abandonment of gas, oil and geothermal wells. DOGGR established a regulatory program for the management of these resources, emphasizing their responsible development through sound engineering practices that protect the environment, prevent pollution and ensure public safety. DOGGR recommends that construction of buildings over or in the proximity of plugged and abandoned oil wells should be avoided, and if not feasible, then plugging or re-plugging wells should be performed to current DOGGR standards. The State Oil and Gas Supervisor can require the re-abandonment of previously plugged or abandoned wells, when construction will be taking place over or in the vicinity of a well is considered to result in a hazard.

(3) Regional Level

(a) San Bernardino County Fire Hazardous Materials CUPA

The Hazardous Materials Division of the San Bernardino County Fire Department (SBCFD) is designated by the State Secretary for Environmental Protection as the Certified Unified Program Agency or "CUPA" for the County of San Bernardino in order to focus the management of specific environmental programs at the local government level. The CUPA is charged with the responsibility of conducting compliance inspections for over 7,000 regulated facilities in San Bernardino County. These facilities handle hazardous materials, generate or treat a hazardous waste and/or operate an underground storage tank. The CUPA provides a comprehensive environmental management approach to resolve environmental issues. This balanced approach utilizes education and effective enforcement procedures to minimize the potential risk to human health and the environment and establish an atmosphere to promote fair business practices.

As a CUPA, SBCFD manages six hazardous material and hazardous waste programs. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits, inspection activities, and enforcement activities throughout the County (with the exception of the City of Victorville). This approach strives to reduce overlapping and sometimes conflicting requirements of different governmental agencies independently managing these programs. The six programs are:

- Hazardous Materials Release Response Plans and Inventory (Business Plan)
- California Accidental Release Program (CalARP)
- Underground Storage Tanks (UST)
- Aboveground Petroleum Storage Act (APSA)/Spill Prevention, Control, and Countermeasure Plan (SPCC Plan)
- Hazardous Waste Generation and On-site Treatment
- Hazardous Materials Management Plans and Inventory Statements under Uniform Fire Code Article 80

(b) Emergency Response

In July 2005, the San Bernardino County Board of Supervisors initiated the reorganization of its fire operations. In 2008, the Fontana Fire Protection District became a subsidiary district of City of Fontana. The Fire District now serves Fontana's corporate limits and the County areas within the City's Sphere of Influence. The SBCFD including its Hazardous Materials Response Team, is now a contract agency to the City of Fontana.

The Office of Emergency Services (County OES) is a Division of the SBCFD and continues to respond to emergencies in the City of Fontana pursuant to its contract. County OES is responsible for disaster planning and emergency management coordination throughout the San Bernardino County Operational Area (OA) by functioning as the Lead Agency for the OA. County OES serves a County population of over 1.8 million and over 20,100 square miles. While County OES does not directly manage field operations, as does Incident Command Post (ICP), it ensures coordination of disaster response and recovery efforts through day-to-day program management and during a disaster/emergency.

In the event of a disaster or an incident requiring coordination, responders report to the San Bernardino County OA Emergency Operations Center (EOC). There are roughly 100 responders that have been trained to perform specific functions designated under the Standardized Emergency Management System (SEMS) to coordinate emergency disasters. According to the City's Municipal Code, the City adopted the State of California's SEMS to manage emergency response and recovery activities.

The Hazardous Materials Division of the SBCFD is designated by the State Secretary for Environmental Protection as the CUPA for the County of San Bernardino, as indicated above. The purpose of the Hazardous Materials Division is to protect the health and safety of the public and the environment of the County of San Bernardino by assuring that hazardous materials are properly handled and stored.

In 1984, a regional Hazardous Materials Emergency Response Team was formed in San Bernardino County. The program was started through a joint effort of the San Bernardino County Fire Chiefs Association, the San

Bernardino County Department of Environmental Health Services (DEHS), and the County Communications Center. The original team included six Environmental Health Specialists from DEHS and thirty firefighters from 15 fire jurisdictions. The agreement called for vehicles, equipment, and training to be provided by DEHS and/or State grants while the participating fire jurisdictions would make in-kind contributions of personnel. Currently, the Hazardous Materials Emergency Response Team includes over 100 personnel that are trained to the State Fire Marshal approved Hazardous Material Specialist level.

Pursuant to California law, San Bernardino County implements its Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP, 2005) to reduce risks from natural and other hazards, and to guide decision-makers as they commit resources to reducing the effects of natural and other hazards. The LHMP analyzes the risks for an expansive set of hazards, including wildland fire, flooding, earthquakes, extreme weather, landslides, hazardous materials incidences, toxic pollution, among others, and outlines the plans and programs to mitigate potential impacts. The intent of the Plan is to designate key roles and tasks in order that the management of emergency operations would be more efficient. The LHMP establishes the various roles in times of crisis of government agencies and promotes disaster prevention programs by way of planning, zoning, and mitigation. The City of Fontana participates in the LHMP.

(c) San Bernardino County Household Hazardous and E-Waste Program

The SBCFD has established the Household Hazardous and E-Waste (electronic waste) Roundup Program. The Household Hazardous Waste Collection Program provides San Bernardino County residents a legal and cost-free way to dispose of unwanted household chemicals and electronics that cannot be disposed of in the regular trash, such as oils, paints, pesticides, batteries, computer monitors, television, and stereos.

(d) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) works with the California Air Resources Board (CARB) and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines. Refer to Section 4.B, *Air Quality*, of this Draft EIR for further discussion regarding toxic air emissions.

(4) Local Level

(a) City of Fontana General Plan

The purpose of the City of Fontana General Plan (General Plan) Safety Element is to improve the safety of the community, and in the process make it more sustainable and prosperous. The Safety Element addresses "a variety of natural and man-made hazards and provides goals and policies aimed at reducing the risk associated with these hazards."

(b) City of Fontana Municipal Code

The City of Fontana Municipal Code (FMC) contains ordinances governing the use and disposal of hazardous waste and hazardous materials in the City. These ordinances are contained in Chapter 8 (Emergency Preparedness), Chapter 9 (Environmental Protection and Resource Extraction), Chapter 13 (Health), Chapter 23 (Sewers and Sewage Disposal), and Chapter 24 (Solid Waste and Recycling) of the FMC.

3. PROJECT IMPACTS

a. Methodology

The evaluation of hazards and hazardous materials impacts is focused on the proposed project's potential to adversely affect, or be affected by, physical hazards or health risks associated with identified hazardous materials. In order to most accurately characterize existing conditions on and near the project site, a site-specific HMA was conducted by Ninyo & Moore in May 2012, the results of which are summarized above under Existing Conditions. Based in part on the results of the HMA, specific environmental hazards have been identified that have the potential to adversely affect the project site by posing a health risk to people living and working on the property. Where applicable, Ninyo & Moore's recommendations to address such environmental risks are provided below under Mitigation Measures. Impacts related to emergency evacuation and emergency response plans is based on the extent to which future development pursuant to the proposed Specific Plan would hinder or otherwise disrupt implementation of such plans.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including hazards and hazardous materials. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to hazards and hazardous materials would occur if the project would result in one or more of the following:

Threshold 1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. A less than significant impact would occur in this regard.);

Threshold 2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment (refer to Impact Statement 4.H-1 below);

Threshold 3: Reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Impact Statement 4.H-2 below);

Threshold 4: Is the project 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 it create a significant hazard to the public or the environment (refer to Impact Statement 4.H-3 below);

Threshold 5: 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, would the project result in a safety hazard for people residing or working in the project area (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 6: For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 7: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement 4.H-4); or

Threshold 8: Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. A less than significant impact would occur in this regard.).

c. Project Design Features

The proposed Specific Plan would be developed incrementally over more than 20 years as market forces dictate, with individual development projects proposed and constructed pursuant to the proposed Specific Plan. Section 4.0, *Development Regulations*, of the proposed Specific Plan articulates the permitted and conditionally permitted uses within each land use district, which include service and light industrial uses within Planning Areas designated as Business Park. While such land uses as research/testing labs, manufacturing, and vehicle repair have the greatest potential to use or handle hazardous materials, the nature and scale of activities involving hazardous materials would be relatively limited. Furthermore, any use or handling of hazardous materials on-site would be regulated by applicable provisions of the FMC, as well as other applicable federal and State regulations regarding hazardous materials.

As also stated in Section 4.0 of the proposed Specific Plan, any private streets within the Specific Plan would be permanently reserved and maintained for their intended purpose acceptable to and enforceable by the City of Fontana; adequate access for emergency vehicles must be maintained at all times; and parking in private drives would be restricted by each project's Covenants, Conditions, and Restrictions (CC&Rs), as applicable.

d. Analysis of Project Impacts

(1) Hazardous Materials Impacts

(a) Hazardous Materials Releases

Threshold	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

Impact 4.H-1 Implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. This impact is considered less than significant with implementation of applicable mitigation measures.

As indicated above, the project area is largely undeveloped, with the majority of the property historically used for agricultural purposes, while the few urbanized portions of the site having been developed with commercial retail and office uses. These existing urban uses do not present a substantial risk relative to the release of hazardous materials into the environment, given the nature of retail and office use operations, which typically don't involve notable quantities of hazardous materials. However, the construction of future uses throughout the undeveloped portions of the Specific Plan area could result in releases of hazardous materials related to various on-site conditions that were noted in the HMA prepared for the proposed project. As discussed above, the following findings and conclusions were noted in the project's HMA:

- The project area is located in an area historically used for agricultural purposes. Portions of the project area were likely applied with commercial pesticides. Concentrations of these substances may still be present, which is considered to be a potential environmental concern for the project site.
- The I-15 freeway runs parallel to the western portion of the Specific Plan area and SR-210 bisects the Specific Plan between the proposed Westgate Center area on the north and the Westgate Village East area on the south. The close proximity of the I-15 and SR-210 freeways and the historical vehicle emissions during the era of leaded gasoline present the potential for aerially deposited lead (ADL) to be present in areas of exposed soil within 50 feet of I-15 and SR-210 freeways, which is considered to be a potential environmental concern for the project site.
- A dry oil well identified as "Laurabel 1" is located approximately 1,363 feet northeast of the Westgate Center Village area. However, the presence of this dry well is <u>not</u> considered a potential environmental concern.
- A high pressure natural gas pipeline owned and operated by Southern California Gas runs through each of the project study areas approximately 2,800 feet east and parallel to the I-15 freeway. This is <u>not</u> considered to be a potential environmental concern for the project site.
- A transmission line corridor with steel lattice transmission towers was observed passing through each of the project study areas, roughly parallel to the I-15 freeway. This is <u>not</u> considered to be a potential environmental concern for the project site.
- During the site reconnaissance there were no observed leaks, spills or stains, or indications of wastes with the exception of piles of dumped materials, including soil, brick and concrete pieces, wood, and other trash and construction debris, which were observed in parts of the southeast corner of Westgate Center study area along Sierra Lakes Parkway. Based on these observations, these items are considered an environmental concern for the project site.
- Three properties are listed on the EnviroStor database. One property is located within the Westgate Village East study area, and two properties are located within 1/8-mile of the project area boundaries. These three facilities have been evaluated or are in the initial stages of evaluation through the DTSC's school evaluation program. Based on information reviewed on the DTSC's EnviroStor website, these facilities would <u>not</u> be considered an environmental concern for the project site.
- Two facilities located within 1/8-mile of the project study area boundaries are listed on the permitted UST database. The two listing on this database are not listed on the LUST database, these listings would <u>not</u> be considered an environmental concern.
- Three properties are listed on the Resource Conservation and Recovery Act (RCRA) database. The following properties, one within the Falcon Ridge Village study area and two within 1/8-mile of the

project area boundaries were listed on this database (one listed as SQGs and two listed as LQG). These property listings are not listed on the spills or releases databases. Therefore, it is unlikely that these facilities have impacted the environmental integrity of the project. These RCRA Generator listings are not considered an environmental concern for the project site.

- One facility, Falcon Ridge Cleaners & Shirt Laundry, located at 15218 Summit Avenue within in the Falcon Ridge Town Center on the western portion of the Falcon Ridge Village study area was listed on the Dry Cleaner database. This facility is listed as active with a description of "Power Laundries, Family and Commercial". This facility is considered a potential environmental concern for the site.

The results of the HMA indicate that several environmental risks exist on the project site or in the surrounding area that could pose a potential health risk to people living or working within the project area if not properly addressed. Other observed conditions or database records are not considered indicative of potential health hazards. As such, the HMA provides recommendations, which are included as mitigation measures below, regarding how to address those conditions representing a health hazard in order to reduce these potential risks to acceptable levels. Additionally, various mitigation measures addressing hazardous materials contained in the City's 2003 General Plan EIR (GP EIR), which are applicable to the proposed Specific Plan, are also provided below. With implementation of applicable GP EIR and project-specific mitigation measures, impacts related to accidental releases of hazardous materials into the environment would be less than significant.

(b) Hazardous Materials Emissions/Handling Near Schools

Threshold	Would the project be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact 4.H-2 Implementation of the proposed project would be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. This impact is considered less than significant with implementation of applicable mitigation measures.

There are a total of four existing schools within one-quarter mile of the Specific Plan boundaries, including the following:

- Summit High School at 15551 Summit Avenue, Fontana (property boundary approximately 200 feet southeast of the proposed Falcon Ridge Village site);
- Heritage Intermediate School at 13766 South Heritage Circle, Fontana (property boundary approximately 150 feet south of the proposed Westgate Village site);
- Solorio Elementary School at 15172 Walnut Street, Fontana (property boundary approximately ¼-mile east of the proposed Westgate Village site) ; and
- Etiwanda High School at 13500 Victoria Avenue, Rancho Cucamonga (property boundary approximately 600 feet northwest of the proposed Westgate Village site across I-15 freeway).

In addition, the proposed Specific Plan includes two ten-acre elementary school sites and one 60-acre high school site which would be developed by the respective school districts in the future as local population growth demands.

As discussed previously, hazardous materials could be used in the construction and operation of new light industrial/commercial development within the Mixed Use portions of the Specific Plan, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products (used in the maintenance of buildings, pumps, pipes, and equipment), diesel and other fuels (used in construction and maintenance equipment and vehicles), and the limited application of pesticides associated with landscaping.

Construction-related health hazards future on-site schools would be minimized through adherence to applicable local, State, and federal regulations regarding hazardous materials, as well as mitigation measures provided below that require site-specific hazardous materials investigations (and cleanup if necessary) for proposed school sites. It is anticipated that prior to occupancy of future on-site schools, site investigation and remediation activities will have adequately addressed potential health hazards and effectively eliminated associated risks. As such, with adherence to existing regulations and implementation of applicable mitigation measures, construction-related health risks to existing and proposed schools would be less than significant.

Although hazardous materials and/or waste generated from operation of future on-site land uses may pose a limited health risk to nearby schools, all businesses that handle or have on-site transportation of hazardous materials would be required to comply with the provisions of the Fontana Fire Protection District/SBCFD, the City of Fontana Municipal Code, and additional State and federal regulatory requirements. As described previously, both federal and State regulations require all businesses that handle more than a specified amount of hazardous materials to submit a Risk Management Plan to the CUPA. The routine transport, use, and disposal of these materials would be subject to a wide range of laws and regulations intended to minimize potential health risks associated with their use or the accidental release of such substances; as such, operational impacts of proposed uses on existing and proposed schools would be less than significant. Moreover, all of the proposed land use districts include development standards, landscape standards, parking and loading standards, and design guidelines aimed to buffer sensitive uses (including schools) from existing off-site and proposed on-site development. These standards and guidelines include: landscaping surrounding parking and loading areas; landscape buffer setbacks along public rights-of-way including fences and/or low walls; and orienting buildings to achieve minimal impacts to adjacent sensitive receptors. Overall, impacts to schools would be less than significant with mitigation incorporated.

(c) Listed Hazardous Materials Sites

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 it create a significant hazard to the public or the environment?

Impact 4.H-3 Implementation of the proposed project would not create a significant hazard to the public or the environment due to hazardous materials sites compiled pursuant to Government Code Section 65962.5. This impact is considered less than significant with implementation of applicable mitigation measures.

As noted above, several properties located within or near the Specific Plan boundaries are included in various hazardous materials database listings obtained as part of the HMA process. While all but one of these properties are not considered potential environmental risks, one property was determined to pose a potential health risk. This property is an existing dry cleaner/laundry business within the on-site Falcon Ridge Town Center, which is listed in the state's Dry Cleaners database (as is required for all licensed dry cleaning businesses in California). This facility operates under a various permits, including permits from the South Coast Air Quality Management District (SCAQMD), which regulates hazardous air emissions from such facilities, and a permit issued by the CUPA that regulates the use, handling, and storage of hazardous materials. While this business is listed in a government hazardous materials database, and is considered a potential health risk due to the use of dry cleaning-related chemicals and associated air emissions, regulation by the SCAQMD and CUPA generally precludes significant health risks resulting from operation of the facility. Furthermore, mitigation provided below would require that business records available at the SBCFD's Hazardous Materials Division be reviewed for compliance with the requirements of the CUPA permit issued for the facility. With adherence to existing permit conditions and implementation of applicable mitigation, impacts related to listed hazardous materials sites would be less than significant.

(2) Emergency Response and Evacuation Plans

Threshold	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact 4.H-4 Implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered less than significant with implementation of applicable mitigation measures.

The City's *Emergency Operations Plan* anticipates that all major streets within the project area would serve as evacuation routes. Construction activities associated with future development could temporarily impact street traffic adjacent to the proposed sites during the construction phase due to roadway improvements and potential extension of construction activities into the right-of-way. This could reduce the number of lanes or temporarily close certain street segments. Any such impacts would be limited to the construction period and would affect only adjacent streets or intersections. With implementation of the recommended mitigation, provided below, which would ensure that temporary street closures would not affect emergency access in the vicinity of future developments, short-term construction-related impacts would be less than significant.

The City of Fontana, including the entire proposed Specific Plan area, is subject to various City, County, and State emergency management plans, as noted previously, which provide procedures, communications protocols, and chains of command for emergency services and public agencies during large-scale disasters or other emergency events. While the proposed project would involve the addition of residents, employees, and shoppers to the project area, implementation of the proposed project would not have a notable impact on the function of established emergency management and response plans. All future development projects would be required to provide sufficient emergency access, as required by the City's Zoning Code and/or the proposed Specific Plan's Development Regulations, as applicable. Furthermore, given that future on-site development pursuant to the proposed Specific Plan would be subject to review and approval by the SBCFD, which is most directly responsible for emergency response in the project vicinity, the systems and facilities designed to protect public health and safety during emergencies would be adequate to effectively implement emergency management procedures within the project area. Coordination with the SBCFD would preclude

the possibility of inadequate access for emergency vehicles at the project site. As no apparent conflicts with adopted emergency response or evacuation plans would result from project implementation, impacts would be less than significant in this regard. As such, operation of future development within the Specific Plan boundaries would not interfere with an adopted emergency response plan and/or the emergency evacuation plan and less than significant impacts would occur.

(3) Consistency With Regulatory Framework

Future development on-site under the proposed Specific Plan would be required to comply with all applicable rules and regulations related to hazardous materials and emergency response/access, including federal and State laws, and local policies and regulations of the Fontana General Plan and FMC, respectively. An evaluation of the proposed Specific Plan's consistency with each of the applicable goals and policies of the General Plan Safety Element is provided below in **Table 4.H-1**, *General Plan Consistency Analysis*. As shown in Table 4.H-1, the proposed project would not conflict with the applicable goals and policies contained in the General Plan Safety Element. Regulatory consistency impacts regarding hazards and hazardous materials would be less than significant.

Table 4.H-1

General Plan Consistency Analysis

Fontana General Plan Safety Element	
Goal/Policy	**Project Consistency Statement**
Goal #5: The potential for hazardous contamination is reduced in our City.	
Policy 5-1: The City shall strive to reduce the potential for residents, workers, and visitors to Fontana to being exposed to hazardous materials and wastes.	**Consistent.** The proposed project would implement applicable mitigation measures, as necessary, to reduce risks to residents, workers, and visitors related to hazardous materials and wastes.
Goal #6: Plans for emergency response and recovery from natural and urban disasters are prepared for our City.	
Policy 6-1: The City shall prepare for emergency response and recovery from natural and urban disasters, especially earthquake hazards.	**Consistent.** While it is the responsibility of the City and other affected public agencies to prepare for emergency response to disasters, the proposed project would not conflict with emergency response or evacuation plans or otherwise adversely affect emergency operations.
Policy 6-2: Use the City of Fontana's Emergency Disaster Plan as the guide for disaster planning in the Fontana Planning Area.	**Consistent.** While it is the responsibility of the City conduct disaster planning within its jurisdiction, the proposed project would not have any adverse effect on the City's efforts in this regard.
Policy 6-3: Aim for City-level self-sufficiency in emergency response.	**Consistent.** The proposed project would not limit the City's ability to provide self-sufficiency in emergency response.
Policy 6-4: Use the City of Fontana's Hazard Mitigation Plan as the guide for identifying hazard risks and vulnerabilities, identifying and prioritizing mitigation actions, encourage the development of local mitigation and provide technical support for these efforts.	**Consistent.** The proposed project would not conflict with or otherwise adversely affect implementation of the City's Hazard Mitigation Plan.

Source: PCR Service Corporation, 2014

4. CUMULATIVE IMPACTS

Impacts related to hazards and hazardous materials are anticipated to occur as buildout of the proposed Specific Plan and identified cumulative development occurs. The majority of the City has been developed with urban uses, and therefore the potential exists for hazards to human health (primarily due to the possibility for disturbance of hazardous materials at contaminated sites, or as part of the routine use of hazardous materials as part of commercial/industrial operations). However, the proposed Specific Plan is not expected to result in cumulatively considerable impacts in relation to hazards and hazardous materials. As noted in the analysis provided above, existing federal, State, and local requirements and regulations, in addition to mitigation measures provided within this Draft EIR, would reduce site-specific impacts of the proposed project and related projects to less than significant levels.

Overall, the identified cumulative development within the site vicinity would be evaluated for its respective public health and safety impacts on a project-by-project basis. It is expected that existing regulatory requirements relating to hazardous materials would be adhered to and that appropriate testing and remediation would be implemented to minimize impacts at each specific development site. This would ensure that future development would not result in cumulatively significant impacts relating to hazards and hazardous materials, and the proposed Specific Plan's contribution to such impacts would not be considerable.

Emergency response and evacuation plans would not be notably affected by cumulative development, since each development project generates an incremental increase in City and County revenues, which are then applied to funding expanded public safety and emergency services in the area. The ongoing expansion of emergency service agencies' staffing, facilities, and equipment to meet growing demand would ensure that adequate response capabilities are maintained. As such, cumulative impacts to emergency response and evacuation plans would be less than significant and the proposed project's contribution to this impact would not be considerable.

5. MITIGATION MEASURES

The following mitigation measures are contained in the City of Fontana General Plan EIR (GP EIR) in order to address potential impacts associated with hazardous materials, which are also applicable to the proposed Specific Plan:

Mitigation Measure H-1: The City shall require that new proposed facilities involved in the production, use, storage, transport or disposal of hazardous materials be located a safe distance from land uses that may be adversely impacted by such activities. Conversely, new sensitive facilities, such as schools, child-care centers, and senior centers, shall not to be located near existing sites that use, store, or generate hazardous materials. [GP EIR Mitigation Measure HM-1]

Mitigation Measure H-2: The City shall assure the continued response and capability of the SBCFD/Fontana Fire Protection District to handle hazardous materials incidents in the City and along the sections of freeways that extend across the City. [GP EIR Mitigation Measure HM-2]

Mitigation Measure H-3: The City shall require all businesses that handle hazardous materials above the reportable quantity to submit an inventory of the hazardous materials that they manage to the SBCFD – Hazardous Materials Division in coordination with the Fontana Fire Protection District. [GP EIR Mitigation Measure HM-4]

Mitigation Measure H-4: The City shall identify roadways along which hazardous materials are routinely transported. If essential facilities, such as schools, hospitals, child care centers or other facilities with special evacuation needs are located along these routes, identify emergency response plans that these facilities can implement in the event of an unauthorized release of hazardous materials in their area. [GP EIR Mitigation Measure HM-5]

In addition to General Plan EIR mitigation measures provided above, the following recommendations are provided as mitigation measures to address potential RECs on the project site based, in part, upon the findings and conclusions of the Hazardous Materials Assessment:

Mitigation Measure H-5: Development of school sites within the project area shall include Phase I Environmental Site Assessment in accordance with ASTM Standard 1527-05 and the DTSC's school site evaluation program.

Mitigation Measure H-6: Due to the potential that concentrations of commercial pesticides likely applied on portions of the Specific Plan area may still be present in on site soils, soil samples shall be collected and analyzed for the presence of organochlorine pesticides and Title 22 Metals. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2008, Interim Guidance for Sampling Agricultural Properties). Soils with elevated organochlorine pesticides or metals compared with these guidelines shall be removed and disposed off site in accordance applicable federal, state, and local regulations.

Mitigation Measure H-7: Because aerially dispersed lead (ADL) may be present in the soil as a result of historical vehicle emissions during the era of leaded gasoline, an ADL survey shall be conducted within areas of exposed soil which will be disturbed during construction within 50 feet of the Interstate 15 freeway and the Interstate 210 freeway. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Transportation, 2007, Caltrans Aerially Deposited Lead Guidance). Soils with elevated lead shall be removed and disposed off site in accordance applicable federal, state, and local regulations. ADL borings shall be located at no more than 300-foot horizontal intervals along the shoulders and medians where earth will be disturbed. The borings shall be advanced up to 4 feet below ground surface or the maximum anticipated construction depth, whichever is shallower.

Mitigation Measure H-8: Construction contractors shall develop a soil management plan (SMP) prior to construction activities to address potentially impacted soils that may be uncovered during the construction phase of each future development project. SMPs shall include: potential chemicals of concern, a health and safety plan, identification of individuals responsible for the implementation of the SMP, dust and odor suppression control methods, procedure for notification and identification of unknown environmental features, site specific soil-management protocols, cleanup criteria, and soil reuse options. In accordance with the SMP, such soil generated during construction activities shall be

characterized for disposal using new laboratory data representative of the soil being excavated and disposed.

Mitigation Measure H-9: Piles of dumped materials, including soil, brick and concrete pieces, wood, and other trash and construction debris, were observed on the southeast corner of Westgate Center study area along Sierra Lakes Parkway. Soil piles and construction debris shall be analyzed for volatile organic compounds, total petroleum hydrocarbons, and Title 22 Metals to characterize the disposal of the unknown debris on the study area. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2001, Information Advisory, Clean Imported Fill Material). A minimum of four samples shall be collected and analyzed under an assumed residential/commercial land use. Sample results shall be compared to residential land use regional screening levels specified by the Department of Toxic Substances Control, 2005, Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, or latest available Regional Screening Levels provided by the United States Environmental Protection Agency, Region 9. Soils or debris with elevated concentrations shall be removed and disposed off site in accordance applicable federal, state, and local regulations.

Mitigation Measure H-10: Due to the presence of a former railroad alignment within project boundaries, any construction in which the soil around the railroad is to be disturbed shall be conducted under the purview of the Fontana Fire Protection District to identify proper handling procedures. Once the soil around the railroad has been removed, a visual inspection of the areas beneath and around the removed area shall be performed. Any stained soils observed underneath the area shall be sampled. Sampling and analysis shall be conducted in accordance with appropriate California guidelines (e.g., Department of Toxic Substances Control, 2001, Information Advisory, Clean Imported Fill Material). Samples shall be collected and analyzed at one-foot intervals to a depth of four feet at a 300-foot horizontal distance. Samples shall be analyzed for total petroleum hydrocarbons, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and Title 22 Metals, in accordance with appropriate US EPA Methods specified in SW-846. Sample results shall be compared to residential land use regional screening levels specified by Department of Toxic Substances Control, 2005, Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, or latest available Regional Screening Levels provided by the United States Environmental Protection Agency, Region 9. Soils with elevated concentrations shall be removed and disposed off site in accordance applicable federal, state, and local regulations.

Mitigation Measure H-11: Records available for the Falcon Ridge Cleaners & Shirt Laundry (15218 Summit Avenue) at the SBCFD Hazardous Materials Division shall be reviewed for compliance with this facility's Consolidated Unified Program Agency (CUPA) permit.

Mitigation Measure H-12: Prior to the issuance of grading permits, future developers shall prepare a Traffic Control Plan (TCP) for implementation during the construction phase. The TCP may include, but is not limited to, the following provisions:

- At least one unobstructed lane shall be maintained in both directions on surrounding roadways.
- At any time only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions.

- If construction activities require the complete closure of a roadway segment, the developer shall provide appropriate signage indicating detours/alternative routes.

Mitigation Measure H-13: Prior to construction, the City of Fontana Engineering Department shall consult with the City of Fontana Police Department to disclose temporary closures and alternative travel routes, in order to ensure adequate access for emergency vehicles when construction of future projects would result in temporary lane or roadway closures.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

All potentially significant impacts would be reduced to less than significant with implementation of the mitigation measure provided above.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
I. HYDROLOGY AND WATER QUALITY

1. INTRODUCTION

This section provides an analysis of the project's potential impacts associated with hydrology (including groundwater) and water quality. The analysis is based on the *Hydrology and Water Quality Technical Report* prepared by Fuscoe Engineering, Inc. (Fuscoe) in September 2012. The *Hydrology and Water Quality Technical Report* is provided in Appendix H of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Hydrology

(a) Existing Drainage Conditions

The Westgate Specific Plan encompasses 964 acres in the northwestern part of the City of Fontana within a mildly sloping alluvial plain of the nearby San Gabriel Mountains in western San Bernardino County. The project site slopes generally in a southwesterly direction with an average slope of 1.5 to 2 percent. Runoff flows though the site primarily in a sheet flow condition until flows are generally intercepted by the I-15 freeway and directed into the existing regional flood control facilities or detention basins.

There are two major earthen drainage channels that existing within the proposed project limits. The channels reside within the most southern portion of the proposed development (Planning Area 4) and ultimately tie into the San Sevaine Channel, an off-site improved flood control channel. Under the proposed condition, the on-site channels will be abandoned and filled in as development occurs.

(b) Flood Control Master Plan & Drainage Facilities

Responsibilities for storm drain systems are shared by the City of Fontana and the San Bernardino Flood Control District (SBCFCD). The SBCFCD is the agency responsible for operations and maintenance of the regional flood control facilities within the City of Fontana (Flood Control Zone 2 per SBCFCD Master Zone Map) and surrounding cities including channels, debris basins and detention facilities. The City of Fontana is responsible for the design, acceptance and maintenance of the local drainage system, local detention basins and storm drain lines that connect into the County regional facilities.

To assist with the regional flood control planning, the City of Fontana developed and adopted a Master Plan of Drainage (MPD) that included the proposed project within the Master Plan area. The master planned facilities are typically designed to accommodate existing conditions and future build out conditions. The project will be responsible for safely conveying the 100-year proposed discharge to a regional or city master planned drainage facility.

The proposed project is divided up into four primary planning areas and is served by four (4) master planned facilities. Planning Area 1 includes the most northerly development area north of Summit Avenue, west of Lytle Creek Road and east of the I-15. Planning Area 1 primarily drains into the Summit Avenue Storm Drain, a regional 12-foot x 8-foot reinforced concrete box (RCB) that drains east to west towards the I-15 freeway, turns southerly along the south side of the I-15 and then crosses under the freeway at Cherry Avenue and drains into Sevaine Basin #5. A portion of the flows also drain into the Hawker-Crawford Channel which connects into Basin #3. Planning Area 2 includes the development area south of Planning Area 1 and is located west of San Sevaine Road, east of Cherry Avenue and north of N. Frontage Road adjacent to the I-15. Planning Area 2 drains to the Highland Channel, a primarily existing concrete open channel with an enclosed portion related to the undercrossing at San Sevaine Road. Planning Area 3 includes the development area east of Cherry Avenue, west of San Sevaine Road and north of Walnut Avenue, and drains into either the Baseline Avenue Storm Drain or the San Sevaine Channel. Planning Area 4 includes the most southern development area and is bounded by Cherry Avenue to the east, Baseline Avenue to the south, Highland Channel to the north and I-15 to the west. Similar to Planning Area 3, runoff drains to either the Baseline Avenue storm drain or the San Sevaine Channel. **Figure 4.I-1**, *Existing and Proposed Hydrology*, below, illustrates the major planning areas of the project, existing and proposed peak flows and major flood control facilities (existing and proposed facilities).

(c) Existing Hydrology Conditions

The existing hydrology conditions for each planning area were evaluated to establish baseline runoff conditions and to provide a comparison for the future development conditions. Following the parameters of the San Bernardino County Hydrology Manual,[1] a portion of the existing site was modeled to determine a representative runoff rate of the undeveloped condition (in cubic feet per acre [cfs/ac]) and then used to calculate the remaining portions of the site for the 2-year, 25-year and 100-year event. A summary of the existing hydrology conditions are provided below in **Table 4.I-1**, *Existing Site Hydrology*. The calculations are preliminary and are intended to estimate peak flows between existing and proposed conditions. Refer to Exhibit 4.I-1 for planning areas and existing peak flow rates.

The National Flood Insurance Act (1968) established the National Flood Insurance Program, which is based on the minimal requirements for flood plain management and is designed to minimize flood damage within Special Flood Hazard Areas. The Federal Emergency Management Agency (FEMA) is the agency that administrates the National Flood Insurance Program. Special Flood Hazard Areas (SFHA) are defined as areas that have a 1 percent chance of flooding within a given year, also referred to as the 100-year flood. Flood Insurance Rate Maps (FIRMs) were developed to identify areas of flood hazards within a community.

According to the Flood Insurance Rate Map (FIRM) catalog, there are three FIRMs produced by FEMA that cover the Westgate Specific Plan project area:

- 06071C8651H (revised August 28, 2008)
- 06071C8635H (revised August 28, 2008)
- 06071C7915H (revised August 28, 2008)

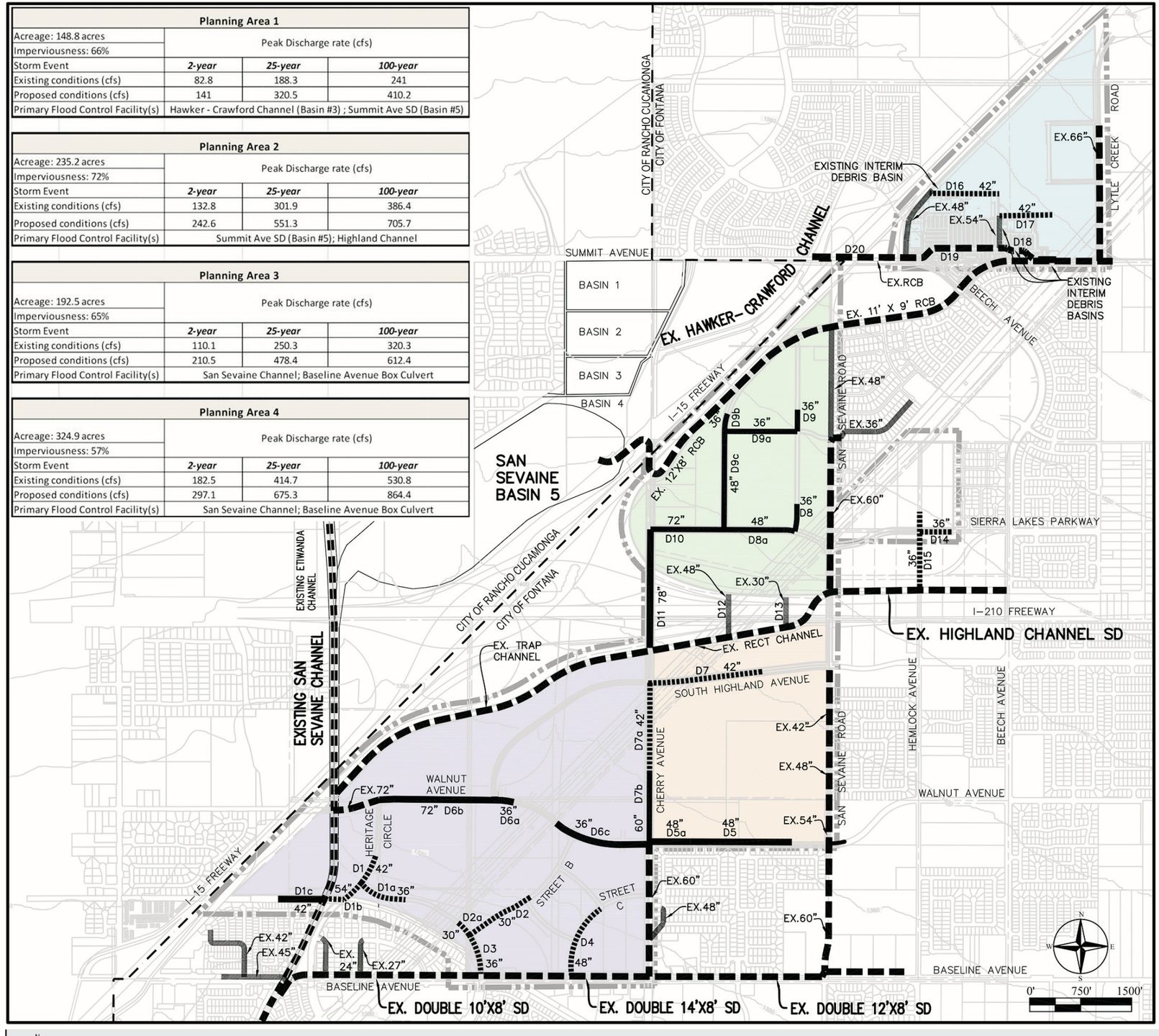
[1] *Williamson and Schmid Civil Engineers. "County of San Bernardino Hydrology Manual," August 1986.*

Planning Area 1			
Acreage: 148.8 acres	Peak Discharge rate (cfs)		
Imperviousness: 66%			
Storm Event	*2-year*	*25-year*	*100-year*
Existing conditions (cfs)	82.8	188.3	241
Proposed conditions (cfs)	141	320.5	410.2
Primary Flood Control Facility(s)	Hawker - Crawford Channel (Basin #3) ; Summit Ave SD (Basin #5)		

Planning Area 2			
Acreage: 235.2 acres	Peak Discharge rate (cfs)		
Imperviousness: 72%			
Storm Event	*2-year*	*25-year*	*100-year*
Existing conditions (cfs)	132.8	301.9	386.4
Proposed conditions (cfs)	242.6	551.3	705.7
Primary Flood Control Facility(s)	Summit Ave SD (Basin #5); Highland Channel		

Planning Area 3			
Acreage: 192.5 acres	Peak Discharge rate (cfs)		
Imperviousness: 65%			
Storm Event	*2-year*	*25-year*	*100-year*
Existing conditions (cfs)	110.1	250.3	320.3
Proposed conditions (cfs)	210.5	478.4	612.4
Primary Flood Control Facility(s)	San Sevaine Channel; Baseline Avenue Box Culvert		

Planning Area 4			
Acreage: 324.9 acres	Peak Discharge rate (cfs)		
Imperviousness: 57%			
Storm Event	*2-year*	*25-year*	*100-year*
Existing conditions (cfs)	182.5	414.7	530.8
Proposed conditions (cfs)	297.1	675.3	864.4
Primary Flood Control Facility(s)	San Sevaine Channel; Baseline Avenue Box Culvert		



LEGEND:

- CITY LIMIT
- SPECIFIC PLAN BOUNDARY
- MASTER PLAN STORM DRAIN
- EXISTING MASTER STORM DRAIN
- LOCAL STORM DRAIN
- EXISTING LOCAL STORM DRAIN
- FUTURE PLANNING AREA 1
- FUTURE PLANNING AREA 2
- FUTURE PLANNING AREA 3
- FUTURE PLANNING AREA 4

N 0 1500 Feet

PCR

Existing and Proposed Hydrology

Westgate Specific Plan

Source: Fuscoe Engineering, Inc., 2012.

FIGURE **4.I-1**

This page is intentionally blank.

Table 4.I-1

Existing Site Hydrology

	Acreage	Peak Discharge Rate (cfs) 2-Year	25-Year	100-Year
Planning Area 1				
Existing Conditions	148.8 ac	109.3	248.4	317.9
Primary Flood Control Facility	Hawker - Crawford Channel (Basin #3); Summit Avenue Storm Drain (Basin #5)			
Planning Area 2				
Existing Conditions	235.2 ac	132.8	301.9	386.4
Primary Flood Control Facility	San Sevaine Basin 5; Highland Channel			
Planning Area 3				
Existing Conditions	192.5 ac	110.1	250.3	320.3
Primary Flood Control Facility	San Sevaine Channel; Baseline Avenue Box Culvert			
Planning Area 4				
Existing Conditions	324.9 ac	182.5	414.7	530.8
Primary Flood Control Facility	San Sevaine Channel; Baseline Avenue Box Culvert			

cfs = cubic feet per second

Source: Hall & Foreman, Inc. Westgate Specific Plan Infrastructure Study, January 2011.

Based on the most recent FIRM maps, the majority of the proposed project resides within Zone X and does not require flood insurance. A small portion of the southwestern development area is located in an area protected by levees and as such does not require flood insurance. Refer to **Figure 4.I-2**, *Flood Insurance Rate Map*, below, for an illustration of designated flood zones in the project area with the project area highlighted in red.

(2) Water Quality

(a) Existing Surface Water Conditions

Runoff from the project site ultimately discharges into the San Sevaine Channel, which drains to the Santa Ana River, Reach 3 and is part of the larger Santa Ana River Hydrologic Unit (801.21). Beneficial uses and water quality objectives have been developed for the Santa Ana River, and are discussed below.

(i) Beneficial Uses

The beneficial uses for Reach 3 of the Santa Ana River, as outlined in the Basin Plan, are:

- AGR Agricultural Supply
- GWR Groundwater Recharge
- REC1 Water Contact Recreation
- REC2 Non-Contact Water Recreation
- WARM Warm Freshwater Habitat

- WILD Wildlife Habitat
- RARE Rare, Threatened, or Endangered Species
- SPWN Spawning, Reproduction and Development

(ii) Water Quality Objectives

In order to maintain the beneficial uses listed above, surface waters must achieve certain water quality objectives outlined in the Basin Plan. **Table 4.I-2**, *Water Quality Objectives for Santa Ana River Reach 3*, below, summarizes the specific water quality objectives for Reach 3 of the Santa Ana River.

Table 4.I-2

Water Quality Objectives for Santa Ana River Reach 3

Total Dissolved Solids (TDS)	Hardness	Sodium	Chloride	Total Inorganic Nitrogen	Sulfate	Chemical Oxygen Demand
700	350	110	140	10[a]	150	30

All units in mg/L unless otherwise noted.
[a] *Total nitrogen, filtered sample.*

Source: Regional Water Quality Control Board (RWQCB) Santa Ana Region. Water Quality Control Plan for the Santa Ana River Basin (Basin 8). January 24, 1995, updated February 2008.

In addition to the specific objectives, qualitative and quantitative general water quality objectives have been set in the Basin Plan for the following constituents:

- algae
- ammonia
- bacteria/coliform
- boron
- chemical oxygen demand
- chloride
- chlorine
- color
- total dissolved solids
- floatables
- fluoride
- hardness
- nitrogen
- metals
- nitrate
- oil & grease
- dissolved oxygen
- pH
- radioactivity
- sodium
- settleable solids
- sulfate
- sulfides
- surfactants
- taste & odor
- temperature
- toxic substances
- turbidity
- methylene blue-activated substances (MBAS)

(iii) Surface Water Quality Conditions

As part of the fourth-term MS4 Permit, the consortium of the San Bernardino County Flood Control District (SBCFCD), the County of San Bernardino, and the incorporated cities of San Bernardino County within the Santa Ana Region developed an Integrated Watershed Monitoring Program (IWMP).

City of Fontana, State of California
FLOOD INSURANCE RATE MAP

Effective Date: August 28, 2008

NOTE: REFER TO ORIGINAL FIRM PANEL MAPS FOR PARCELS CLOSE TO THE FLOOD ZONE BOUNDARY

Last Revised: January 11, 2012

Click here for FEMA Map Service Center website: http://msc.fema.gov

FEMA Map Service Center

Product Catalog | Map Search | Quick Order | Digital Post Office | Help

Map Disclaimer

The data provided hereon may be inaccurate or out of date and any person or entity who relies on said information for any purpose whatsoever does so solely at his or her own risk.

Neither the City of Fontana nor any agency, officer, or employee of either nor of any information provider warrants the accuracy, reliability of timeliness of any of the data provided heron.

THIS INFORMATION IS PROVIDED 'AS IS' WITHOUT WARRANTY OF ANY KIND INCLUDING BY WAY OF ILLUSTRATION AND NOT OF LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE

The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities are determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazards (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazards (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachments so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; areas protected by levees from the 1% annual chance flood.

OTHER FLOOD AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.
- - - -	Zone D boundary

FLOOD INSURANCE RATE MAP NUMBER NOTES

** PANEL NOT PRINTED - UNINCORPORATED AREAS ZONED D; OTHER AREAS ZONE X

*** PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

SEAL OF THE CITY OF FONTANA, CALIFORNIA — INCORPORATED JUNE 25, 1952

N

0 2,000 4,000 6,000 Feet

1 inch = 2,000 feet

06071C7915H

06071C7920H

06071C7895H

06071C8635H

06071C8651H

06071C8652H

*** 06071C8656H

*** 06071C8657H
PANEL NOT PRINTED
NO SPECIAL FLOOD HAZARD AREAS

06071C8634H

06071C8653H

06071C8654H

06071C8658H

*** 06071C8659H
PANEL NOT PRINTED
NO SPECIAL FLOOD HAZARD AREAS

*** 06071C8665H
PANEL NOT PRINTED
NO SPECIAL FLOOD HAZARD AREAS

06071C8642H

06071C8666H

** 06071C8667H
PANEL NOT PRINTED
UNICORPORATED AREAS ZONED D;
OTHER AREAS ZONE X

Click on a Flood Insurance Rate Map (FIRM) panel number to open a scanned image of the panel map. Any Letter of Map Revision (LOMR) that modified the panel, can also be accessed through this panel map.

Locate the map at: T:\Adobe Reader PDF Files\Flood Insurance Rate Map 11x17.pdf

Hawker Crawford Channel
Highland Channel
Etiwanda/San Sevaine Channel
West Fontana Channel
East Fontana Channel
I-10 Channel
Declez Channel
San Sevaine Channel

SR-210 FREEWAY
I-15 FREEWAY
I-10 FREEWAY
UNION PACIFIC RR
METROLINK
SOUTH HIGHLAND AVE
BASELINE AVE
FOOTHILL BLVD
ARROW BLVD
MILLER AVE
MERRILL AVE
RANDALL AVE
SAN BERNARDINO AVE
VALLEY BLVD
SLOVER AVE
SANTA ANA AVE
JURUPA AVE
MARLAY AVE
EAST AVE
ETIWANDA AVE
CHERRY AVE
BEECH AVE
CITRUS AVE
SIERRA AVE
ALDER AVE
MAPLE AVE
MULBERRY AVE
SUMMIT AVE

ZONE X
X PROTECTED BY LEVEE
AE FLOODWAY
AE
A
AH
AO
AO (DEPTH 1)
AO (DEPTH I)
AO (DEPTH 2)
AO (DEPTH 3)
D
0.2 PCT
.02 PCT

PCR

N 0 6000 Feet

Flood Insurance Rate Map

Westgate Specific Plan

Source: City of Fontana, 2012.

FIGURE **4.I-2**

This page is intentionally blank.

The overall objective of the IWMP is to provide data to support the development of an effective watershed and key environmental resources management program that focuses resources on the priority pollutants of concern. Based on a risk-based analysis of historical water quality data collected for almost 20 years, the Permittees identified a priority list of pollutants of concern in the MSAR watershed. The pollutants of concern, in order of priority from high to low are: (1) high priority–bacteria; (2) medium priority–metals (zinc, copper, lead); and (3) low priority–nutrients, total suspended solids (TSS) and chemical oxygen demand (COD). This priority ranking provides the basis for a risk-based approach to overall Program storm water management and to direct resources to the most important water quality monitoring and improvement activities.[2] The finding of bacteria as the highest priority further substantiates the need for implementation of the MSAR Bacteria Indicator TMDL to reduce controllable sources of bacteria within the watershed for both dry weather and wet weather flows.

As stated previously, various water bodies in the MSAR watershed are listed on the state 303(d) list of impaired waters due to high levels of fecal coli form bacteria, including the Santa Ana River Reach 3, which runoff from the project site ultimately discharges to. The MSAR TMDLs established limits for bacterial source indicators for the Santa Ana River Reach 3 (not in San Bernardino County), Chino Creek Reaches 1 and 2), Prado Park Lake, Mill Creek (Prado Area), and Cucamonga Creek (Reach 1).

The purpose of the MSAR TMDL is to assure that REC1 beneficial uses are protected. Wasteload allocations were adopted for fecal coliform and E. coli in the above impaired water bodies. Although the Basin Plan currently does not have an established objective for E. coli, the Stormwater Quality Standards Task Force is expected to make recommendations for the adoption of alternative bacterial indicators such as E. coli, based on US EPA's "Ambient Water Quality Criteria for Bacteria - 1986".

These and other recommendations of the Task Force are likely to result in changes to recreational water quality objectives. When and if the Basin Plan is amended to incorporate new beneficial use definitions, designations and/or bacterial standards, the MSAR TMDLs will be revised, as appropriate.[3]

In accordance with the requirements of the fourth-term MS4 Permit, a Comprehensive Bacteria Reduction Plan (CBRP) was developed to provide a comprehensive plan for attaining effluent limits/WLAs for the MSAR TMDL by integrating existing control programs and efforts with new permit mandates and other additional activities necessary to address controllable urban sources of bacterial indicators. Implementation of the CBRP relies on a step-wise approach that implements key actions to identify controllable urban sources of bacterial indicators, evaluate and select a mitigation alternative, and, where necessary, construct structural BMPs to mitigate controllable sources. Selected BMPs range from programmatic activities that set the stage for other CBRP elements (e.g., dry weather flow source evaluation activities) to specific activities that can reduce dry weather flows or mitigate controllable urban sources of bacterial indicators.[4]

---

[2] *Larry Walker Associates. (2011, August). San Bernardino County Stormwater Program Integrated Watershed Monitoring Program (IWMP). Submitted to Santa Ana Regional Water Quality Control Board.*

[3] *California Regional Water Quality Control Board, Santa Ana Region. (2010, January 29). Waste Discharge Requirements for the County of San Bernardino and the Incorporated Cities of San Bernardino County, Order No. R8-2010-0036, NPDES No. CAS618036, Area-wide Urban Storm Water Runoff.*

[4] *CDM. (2011, June 28). Comprehensive Bacteria Reduction Plan. Submitted to California Regional Water Quality Board Santa Ana Region by the San Bernardino County Flood Control District.*

The TMDL implementation requirements were also incorporated into the fourth-term MS4 Permit. As a MS4 Permittee in the MSAR watershed, the City of Fontana will evaluate and modify if necessary existing ordinances and authority available to manage dry weather runoff from water use practices and improve management of animal wastes to control known pathogen or bacterial indicator sources.

In addition, the city will also evaluate potential for transient camps to contribute bacterial indicators to MS4 dry weather flow, and if determined necessary, develop and implement transient camp closure activities.

Since the Westgate Specific Plan area is located within the MSAR watershed area, the individual projects will be required to implement BMPs to incorporate LID BMPs that fully retain storm water or provide medium or high effectiveness in reducing bacteria pollutants prior to release, if on-site retention is feasible. Based on the highly permeable soil conditions and favorable infiltration conditions, infiltration best management practices (BMPs) will be utilized within the Westgate Specific Plan. In addition, the projects will also be required to incorporate source control BMPs identified in the CBRP, unless they do not apply to the proposed project.[5] These include street sweeping, irrigation or water conservation practices, septic system management, pet waste management and maintenance.

(b) Existing Groundwater Conditions

Geographically, the Westgate Specific Plan project area is located in the northeast portion of the Chino-North Basin, Management Zone 1, as designated in the Basin Plan. The larger Chino Basin is generally bounded by the Chino Hills to the west, the San Gabriel Mountains and the Cucamonga Basin to the north, the Rialto-Colton fault on the east, the Jurupa Mountains to the southeast, and the Puente Hills and Chino Fault to the south.[6]

(i) Beneficial Uses

The Basin Plan identifies the Chino-North Management Zone 1 as having four beneficial uses. They are:

- MUN – Municipal and Domestic Supply;
- IND – Industrial Service Supply; and
- PROC – Industrial Process Supply.
- AGR – Agricultural Supply;

(ii) Water Quality Objectives

Specific water quality objectives have been established for the Chino-North Management Zone 1 basin to maintain its beneficial uses, and are summarized below in **Table 4.I-3**, *Water Quality Objectives for Chino Groundwater Management Zones*.

[5] *CDM. (2011, July 28). San Bernardino County Stormwater Program Technical Guidance Document for Water Quality Management Plans (WQMP). Submitted to the California Regional Water Quality Board Santa Ana Region July 29, 2011.*

[6] *California Department of Water Resources. (2003). California's Groundwater. Bulletin 118. Last update January 20, 2006.*

Table 4.I-3

Water Quality Objectives for Chino Groundwater Management Zones

Groundwater Management Zone [a]	Total Dissolved Solids (TDS)	Hardness	Sodium	Chloride	Total Inorganic Nitrogen	Sulfate
Chino-North "Maximum Benefit"	420	--	--	--	5.0	--
Chino 1 "Antidegradation"	280	--	--	--	5.0	--

All units in mg/L unless otherwise noted.

[a] *"Maximum benefit" objectives apply unless Regional Board determines that lowering of water quality is not of maximum benefit to the people of the state; in that case, "antidegradation" objectives apply (for Chino North, antidegradation objectives for Chino 1, 2, 3 would apply if maximum benefit is not demonstrated).*

Source: Regional Water Quality Control Board (RWQCB) Santa Ana Region. Water Quality Control Plan for the Santa Ana River Basin (8). January 24, 1995, updated February 2008.

In addition to specific numeric water quality objectives, narrative objectives for all groundwaters in the Santa Ana Region also apply to the Chino-North Groundwater Management Zone. Narrative objectives have been established for the following constituents:

- arsenic
- boron
- cyanide
- MBAS
- oil & grease
- sodium
- total dissolved solids
- bacteria, coliform
- chloride
- fluoride
- metals
- pH
- sulfate
- toxicity
- barium
- color
- hardness (as $CaCO_3$)
- nitrate
- radioactivity
- taste & odor

(iii) Groundwater Conditions

Based on the California Groundwater Bulletin 118, the project is located in the Upper Santa Ana Valley Groundwater Basin, Chino Subbasin. The basin includes water-bearing units consisting of Holocene and Upper Pleistocene Alluvium. The Holocene Alluvium consists primarily of alluvial-fan deposits, with maximum thickness of 150 feet that are coarsest at the mouths of the canyons. The Pleistocene Alluvium is exposed primarily in the northern part of the subbasin and supplies most of the water to wells within the subbasin. The Alluvium is about 600 to 700 feet thick containing finer, alluvial fan deposits and coarser, fluvial deposits.[7] Within the vicinity of the Westgate Specific Plan area, groundwater depths range between 550 to 600 feet below ground surface.[8]

There are several groundwater recharge facilities throughout the subbasin, including Basins #1-5 as part of the San Sevaine Spreading Grounds located west of the Westgate Specific Plan project area.

[7] *California Department of Water Resources. (2003). California's Groundwater. Bulletin 118. Updated January 20, 2006.*

[8] *Wildermuth Environmental, Inc. (2006). Depth to Groundwater Contours, Chino Basin Fall 2006. Retrieved September 7, 2012, from http://www.cbwm.org/docs/engdocs/maps/DTW_CBWM.PDF*

Percolation tests by the Chino Basin Municipal Water District in the San Sevaine Spreading Grounds and San Sevaine Basins indicated a sustained percolation rate of 2.5 feet per day.[9]

(c) Existing Soil Conditions

To determine geotechnical information on the project site's soils as they relate to runoff characteristics, a Custom Soils Resource Report for the project site was generated utilizing data from the Natural Resources Conservation Service. Soils on the site include Hanford course sandy loam (HaC, ~ 22%), PS Amments and fluvents (Ps, ~1%), Soboba gravelly loamy sand (SoC, ~3%), SO Boba stony loamy sand (SpC, ~ 1%), Tujunga loamy sand (TuB, ~1%) and Tujunga gravelly loamy sand (TvC, ~72%). All soils fall within shallow slope ranges from 2 to 9 percent. TvC is the most prominent soil within the project site which was formed by the alluvial fans from the foothills of the San Gabriel Mountains. The soil is slightly acidic, and light brown loamy sand to brown coarse sand. The soil is very permeable, and runoff is slow to very slow. Roots can penetrate to a depth of 60 inches or greater. Available water capacity is 4 to 5 inches. All of the soil types belong to the Hydrologic Soil Group A, and capacity of the most limiting layer to transmit water (Ksat) are high to very high (5.95 to 19.88 in/hr).[10]

b. Regulatory Framework

(1) Federal Clean Water Act

Controlling pollution of the nation's receiving water bodies has been a major environmental concern for more than three decades. Growing public awareness of the impacts of water pollution in the United States culminated in the establishment of the federal Clean Water Act[11] (CWA) in 1972, which provided the regulatory framework for surface water quality protection.

The United States Congress amended the CWA in 1987 to specifically regulate discharges to waters of the US from public storm drain systems and storm water flows from industrial facilities, including construction sites, and require such discharges be regulated through permits under the National Pollutant Discharge Elimination System (NPDES).[12] Rather than setting numeric effluent limitations for storm water and urban runoff, CWA regulation calls for the implementation of Best Management Practices (BMPs) to reduce or prevent the discharge of pollutants from these activities to the Maximum Extent Practicable (MEP) for urban runoff and meeting the Best Available Technology Economically achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) standards for construction storm water. Regulations and permits have been implemented at the federal, state, and local level to form a comprehensive regulatory framework to serve and protect the quality of the nation's surface water resources.

In addition to reducing pollution with the regulations described above, the CWA also seeks to maintain the integrity of clean waters of the United States – in other words, to keep clean waters clean and to prevent undue degradation of others. As part of the CWA, the Federal Antidegradation Policy [40 CFR Section 131.12]

---

9 *J.V.R. and Southwestern Field Biologists. (1994, February). San Sevaine Creek Water project Initial Study.*

10 *United States Department of Agriculture, Natural Resources Conservation Service. (2012, August 14). Custom Soil Resource Report for San Bernardino County Southwestern Part, California. Westgate Specific Plan, Fontana.*

11 *Also referred to as the Federal Water Pollution Control Act of 1972.*

12 *CWA Section 402(p).*

states that each state "shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy…" [40 CFR Section 131.12(a)]. Three levels of protection are defined by the federal regulations:

1. Existing uses must be protected in all of the Nation's receiving waters, prohibiting any degradation that would compromise those existing uses;
2. Where existing uses are better than those needed to support propagation of aquatic wildlife and water recreation, those uses shall be maintained, unless the state finds that degradation is "…necessary to accommodate important economic or social development" [40 CFR Section 131.12(a)(2)]. Degradation, however, is not allowed to fall below the existing use of the receiving water; and
3. States must prohibit the degradation of Outstanding National Resource Waters, such as waters of National and State parks, wildlife refuges, and waters of exceptional recreation or ecological significance.

(2) Porter-Cologne Water Quality Act

In the State of California, the State Water Resources Control Board (SWRCB) and local Regional Water Quality Control Boards (RWQCBs) have assumed the responsibility of implementing US EPA's NPDES Program and other programs under the CWA such as the Impaired Waters Program and the Antidegradation Policy. The primary quality control law in California is the Porter-Cologne Water Quality Act (Water Code Sections 13000 et seq.). Under Porter-Cologne, the SWRCB issues joint federal NPDES Storm Water permits and state Waste Discharge Requirements (WDRs) to operators of municipal separate storm sewer systems (MS4s), industrial facilities, and construction sites to obtain coverage for the storm water discharges from these operations.

(3) Basin Plan for the Santa Ana Region

In addition to its permitting programs, the SWRCB, through its nine RWQCBs, developed Regional Water Quality Control Plans (or Basin Plans) that designate beneficial uses and water quality objectives for California's surface waters and groundwater basins, as mandated by both the CWA and the state's Porter-Cologne Water Quality Control Act. Water quality standards are thus established in these Basin Plans and provide the foundation for the regulatory programs implemented by the state. The Santa Ana RWQCB's Basin Plan, which covers the Westgate Specific Plan project area, specifically (i) designates beneficial uses for surface waters and groundwaters, (ii) sets narrative and numerical objectives that must be met in order to protect the beneficial uses and conform to the State's antidegradation policy, and (iii) describes implementation programs to protect all waters in the Region.4 In other words, the Santa Ana RWQCB Basin Plan provides all relevant information necessary to carry out federal mandates for the antidegradation policy, 303(d) listing of impaired waters, and related TMDLs, and provides information relative to NPDES and WDR permit limits.

(4) Clean Water Act Section 303(d) List of Water Quality Limited Segments

Under Section 303(d) of the CWA, states are required to identify water bodies that do not meet their water quality standards. Once a water body has been listed as impaired, a Total Maximum Daily Load (TMDL) for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the

daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL.

Storm water runoff from the Westgate Specific Plan project area ultimately discharges into San Sevaine Channel, which is not listed as impaired. However, San Sevaine Channel drains to the Santa Ana River Reach 3, which is listed as impaired for copper, lead, and pathogens per the 2010 California 303(d) List of Water Quality Limited Segments.[13]

(5) Total Maximum Daily Loads (TMDLs)

Once a water body has been listed as impaired on the 303(d) list, a TMDL for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general terms, municipal, small MS4, and other dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline.

In 1994 and 1998, the Santa Ana RWQCB listed various water bodies in the Middle Santa Ana River (MSAR) watershed to the CWA Section 303(d) list due to exceedances of the fecal coliform objective established to protect Water Contact Recreation (REC-1) beneficial uses. The water bodies listed included the Santa Ana River Reach 3, Chino Creek Reaches 1 & 2, Mill Creek (Prado Area), Cucamonga Creek (Reach 1), and Prado Park Lake. On February 3, 2005, the Santa Ana RWQCB amended the Basin Plan to incorporate the Middle Santa Ana River Waterbodies Bacterial Indicator TMDLs (referred to as "MSAR Bacteria Indicator TMDL"). The amendment was adopted by the Santa Ana RWQCB on August 26, 2005, approved by the SWRCB Office of Administrative Law on September 1, 2006, and subsequently approved by the US EPA on May 16, 2007.[14]

The TMDL/Basin Plan Amendment specifies TMDLs, wasteload allocations for point source discharges (WLAs) and load allocations for nonpoint source discharges (LAs) for fecal coliform and E. coli in MSAR watershed water bodies. WLAs are specified for urban discharges and discharges from Confined Animal Feeding Operations (CAFOs), including storm water. LAs are specified for runoff from other types of agriculture and from natural sources (open space/undeveloped forest land).

TMDLs, WLAs and LAs are specified for both dry weather discharges and wet weather discharges, with separate compliance schedules. To account for unknowns such as bacterial re-growth, die-off and dilution,

[13] *State Water Resources Control Board (SWRCB). 2010 California 303(d) List of Water Quality Limited Segments. Approved by the US EPA October 11, 2011.*

[14] *Santa Ana Watershed project Authority. (n.d.). Background Middle Santa Ana Bacterial Indicator TMDL. Retrieved June 13, 2012, from http://www.sawpa.org/roundtable-MSARTF.html.*

the TMDL/Basin Plan Amendment specifies an explicit margin of safety of 10% applied to the TMDLs, waste load allocations and load allocations.[15]

Summarized below are the numeric targets selected in order to meet the water quality objectives for the protection of beneficial uses in the impaired waters as part of the TMDL. Regardless of the allocation (WLA or LA), the fecal indicator bacteria numeric targets are the same.[16]

- Fecal coliform: 5-sample/30-day logarithmic mean less than 180 organisms/ 100 mL and not more than 10% of the samples exceed 360 organisms/100 mL for any 30-day period.
- E. coli: 5-sample/30-day logarithmic mean less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100 mL for any 30-day period.

In response to the TMDL, the County of San Bernardino developed and submitted a final Middle Santa Ana River (MSAR) Bacterial Indicator Total Maximum Daily Load (TMDL) Comprehensive Bacteria Reduction Plan (CBRP) in Compliance with Board Order, R8-2010-0036, Requirement V.D.1.B on June 28, 2011. The CBRP relies on "multiple barriers" to reduce/meet the urban waste load allocation during dry weather conditions including prevention, LID measures, expanded urban source evaluation programs, structural BMPs and interception/diversion if necessary.[17]

(6) Construction General Permit

The Construction General Permit (CGP), Order No. 2009-0009-DWQ, NPDES Permit No. CAS000002, regulates storm water and non-storm water discharges associated with construction activities disturbing 1 acre or greater of soil. Construction sites that qualify must submit a Notice of Intent (NOI) to gain permit coverage or otherwise be in violation of the CWA and California Water Code.

The CGP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for each individual construction project greater than or equal to 1 acre of disturbed soil area (regardless of the site's Risk Level). The SWPPP must list Best Management Practices (BMPs) that the discharger will use to control sediment and other pollutants in storm water and non-storm water runoff; the BMPs must meet the BAT and BCT performance standards. Additionally, the SWPPP must contain a visual monitoring inspection program; a chemical monitoring programs for sediment and other "non-visible" pollutants to be implemented based on the Risk Level of the site, as well as inspection, reporting, training and record-keeping requirements.

In addition to the requirements above, the CGP contains requirements for construction sites based on the sites risk of discharging construction-related pollutants, as well as additional monitoring and reporting requirements. Each construction project must complete a Risk Assessment prior to commencement of

[15] *Santa Ana Regional Water Quality Control Board (RWQCB). (2005, February 3). Resolution No. R8-2005-0001. Resolution amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate Bacterial Indicator Total Maximum Daily Loads (TMDLs) for Middle Santa Ana River Watershed Bodies. Adopted August 26, 2005.*

[16] *CDM. (2010, February 15). Middle Santa Ana River Watershed Bacterial Indicator TMDL: Triennial Report.*

[17] *CDM. (2011, June 28). Comprehensive Bacteria Reduction Plan. Submitted to California Regional Water Quality Board Santa Ana Region by the San Bernardino County Flood Control District.*

construction activities, which assigns a Risk Level to the site and determines the level of water quality protection/requirements the site must comply with. The Permit also includes provisions for meeting specific Action Levels for pollutants based on the sites' Risk Level.

Individual projects within the Westgate Specific Plan that disturb greater than 1 acre will be subject to the storm water discharge requirements of the CGP. The projects will require submittal of a NOI, SWPPP, Risk Assessment and other Permit Registration Documents (PRDs) required by the CGP prior to the commencement of soil disturbing activities. In the Santa Ana Region, the SWRCB is the permitting authority, while the Santa Ana RWQCB provides local oversight and enforcement of the CGP.

(7) San Bernardino County MS4 Permit

In January 2010, the Santa Ana RWQCB reissued the MS4 Storm Water Permit as WDR Order R8-2010-0036 (NPDES Permit No. CAS618036) to the San Bernardino County Flood Control District, the County of San Bernardino, and the incorporated cities of San Bernardino County within the Santa Ana Region (also referred to as "fourth-term MS4 Permit"). The permit contains provisions for receiving water limitations, discharge prohibitions, and storm water management, monitoring and reporting for reducing pollutants to the MEP standard.

In response to the fourth-term MS4 Permit, the County developed a Model Area-Wide Local Implementation Plan (LIP) in July 2010 that was approved by the Santa Ana RWQCB in January 2011. The Local Implementation Plan (LIP), a requirement of the MS4 Permit (Sections III.A.2.a; III.B1), describes how the City of Fontana implements the requirements of the MS4 Permit within its own jurisdiction. In addition, the County developed an in-depth Technical Guidance Document (TGD) for Water Quality Management Plans (WQMP) in July 2011 and is waiting for Santa Ana RWQCB approval. Accordingly, the LIP and TGD are the principal documents that comprehensively translate the MS4 Permit requirements into standards, conditions of approvals and actions that manage water quality in the local MS4.

This new MS4 Permit includes new requirements that follow similar changes that other Regional Boards have made in their recent permit renewals, such as within the Orange County portion of the Santa Ana region as well as the San Diego RWQCB. This includes requirements pertaining to hydromodification and low impact development (LID) features associated with new developments and redevelopments.[18]

(8) City of Fontana Water Quality Management Plan (WQMP)

One requirement of the City's Storm Water Program is the provision to prepare Water Quality Management Plans (WQMPs) for specified categories of development aimed at reducing pollutants in post-development runoff. Specifically, a WQMP includes Santa Ana RWQCB-approved BMPs, where applicable, that address post-construction management of storm water runoff water quality. This includes operation and maintenance requirements for all structural or treatment control BMPs required for specific categories of developments to reduce pollutants in post-development runoff to the MEP.

[18] *Hydromodification is generally defined as the alteration of natural flow characteristics.*

In addition, projects designated as "Priority Projects" are required to incorporate LID features and BMPs to address pollutants of concern from the project site. In accordance with the fourth-term MS4 Permit and 2011 TGD for WQMPs, a project is considered a Priority project if it meets any of the following criteria:

a. All significant redevelopment projects. Significant redevelopment is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development.

b. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the Permittees.

c. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 75367539).

d. Restaurants (with SIC code 5812) where the land area of development is 5,000 square feet or more.

e. All hillside developments of 5,000 square feet or more which are located on areas with known erosive soil conditions or where the natural slope is twenty five percent or more.

f. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas (ESAs) such as areas designated in the Ocean Plan as areas of special biological significance (ASBS) or water bodies listed on the CWA Section 303(d) list of impaired waters.

g. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary parking or storage of motor vehicles.

h. Retail Gasoline Outlets (RGOs) that are either 5,000 sq feet or more, or have a projected average daily traffic of 100 or more vehicles per day.

i. Emergency public safety projects in any of the above-listed categories shall be excluded if the delay caused due the requirement for a WQMP compromises public safety, public health and/or environmental protection.

As required by the City of Fontana's LIP and municipal ordinances on storm water quality management, project-specific WQMPs must be submitted to the City for approval prior to the City issuing any building or grading permits. Since the Westgate Specific Plan includes the future development of several of the categories listed above, the individual projects and Planning Areas will be subject to the requirements of the City of Fontana WQMP. Individual projects within the Westgate Specific Plan area will be required to submit a project-specific WQMP to ensure all requirements of the City of Fontana's Storm Water Program/LIP and ordinances on storm water quality are addressed for that project. This includes meeting any new requirements associated with Priority Projects, as well as the requirements of the MS4 permit re-issuance, which includes LID features and/or hydromodification controls.

3. PROJECT IMPACTS

a. Methodology

(1) Hydrology

The analysis of hydrology impacts includes a calculation of pre-project and post-project runoff rates during storm events. Potential impacts to the storm drain system were analyzed by comparing the calculated pre-project runoff rates to the calculated post-project runoff rates, taking into consideration the capacity of the existing storm drain systems serving the site.

(2) Water Quality

Water quality impacts were assessed by considering the types of pollutants and/or effects on water quality likely to be associated with construction and operation of the project, project design features to treat contaminants, and expected contaminant flows with project implementation. Project consistency with relevant regulatory permits/requirements, including BMPs and applicable plans, is evaluated to demonstrate how compliance would ensure that the project would not significantly degrade existing water quality.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including hydrology and water quality. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to hydrology and water quality would occur if the project would result in one or more of the following:

Threshold 1: Violate any water quality standards or waste discharge requirements (refer to Impact Statement 4.I-3 below);

Threshold 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted (refer to Impact Statement 4.I-2 below);

Threshold 3: Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (refer to Impact Statement 4.I-1 below);

Threshold 4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site (refer to Impact Statement 4.I-1 below);

Threshold 5: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (refer to Impact Statement 4.I-1 below);

Threshold 6: Otherwise substantially degrade water quality (refer to Impact Statement 4.I-3 below);

Threshold 7: Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or other flood hazard delineation maps (refer to Impact Statement 4.I-1 below);

Threshold 8: Place within a 100-year flood plain structures which would impede or redirect flood flows (refer to Impact Statement 4.I-1 below);

Threshold 9: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (refer to Impact Statement 4.I-1 below); or

Threshold 10: Inundation by seiche, tsunami, or mudflow (refer to Chapter 6, Other Mandatory CEQA Considerations, and the Initial Study contained in Appendix A of this Draft EIR. No impact would occur in this regard.).

c. Project Design Features

The proposed Specific Plan includes a comprehensive system of storm drain improvements and water quality features to address hydrology/drainage and water quality impacts of future development on-site, which are based on engineering studies performed by the applicant's engineer. The Westgate Specific Plan's proposed storm drain improvements are illustrated below in **Figure 4.I-3**, *Storm Drain Master Plan*, while the proposed water quality features to be implemented on-site are shown in **Figure 4.I-4**, *Water Quality Management Plan*. The proposed project would implement a multitude of drainage and water quality improvements as needed over time as development occurs, which would serve to reduce the effects of the project. The necessary improvements, including drainage and water quality-related BMPs, are discussed below in the context of applicable regulations related to stormwater management.

(1) Hydrology

In addition to addressing water quality, project WQMP's must also address Hydrologic Conditions of Concern (HCOCs). New development typically results in an increased proportion of impervious surfaces on the project site or a reduction of pervious surfaces. Changes in impervious condition causes changes to the hydrologic conditions including increased runoff and velocity, reduced infiltration opportunities, increased flow frequency, flow duration and shortens time of concentration (Tc) leading to faster peak flow rates. Increased volumes and velocities of storm water discharges into natural watercourses can cause stream bank erosion and physical modifications that adversely impact aquatic ecosystems and stream habitat. The collective changes in the hydrologic regime caused by development is termed "hydromodification".[19]

If the proposed project is determined to have the potential to cause or contribute to a downstream HCOC, then the WQMP must address both LID and HCOC performance criteria (Sections 4.3.1 and 4.3.2 in the County's TGD for WQMPs). Conversely, if the project is not within a region upstream of a HCOC, then only LID performance criteria are applicable and associated BMP selection and evaluation steps apply.

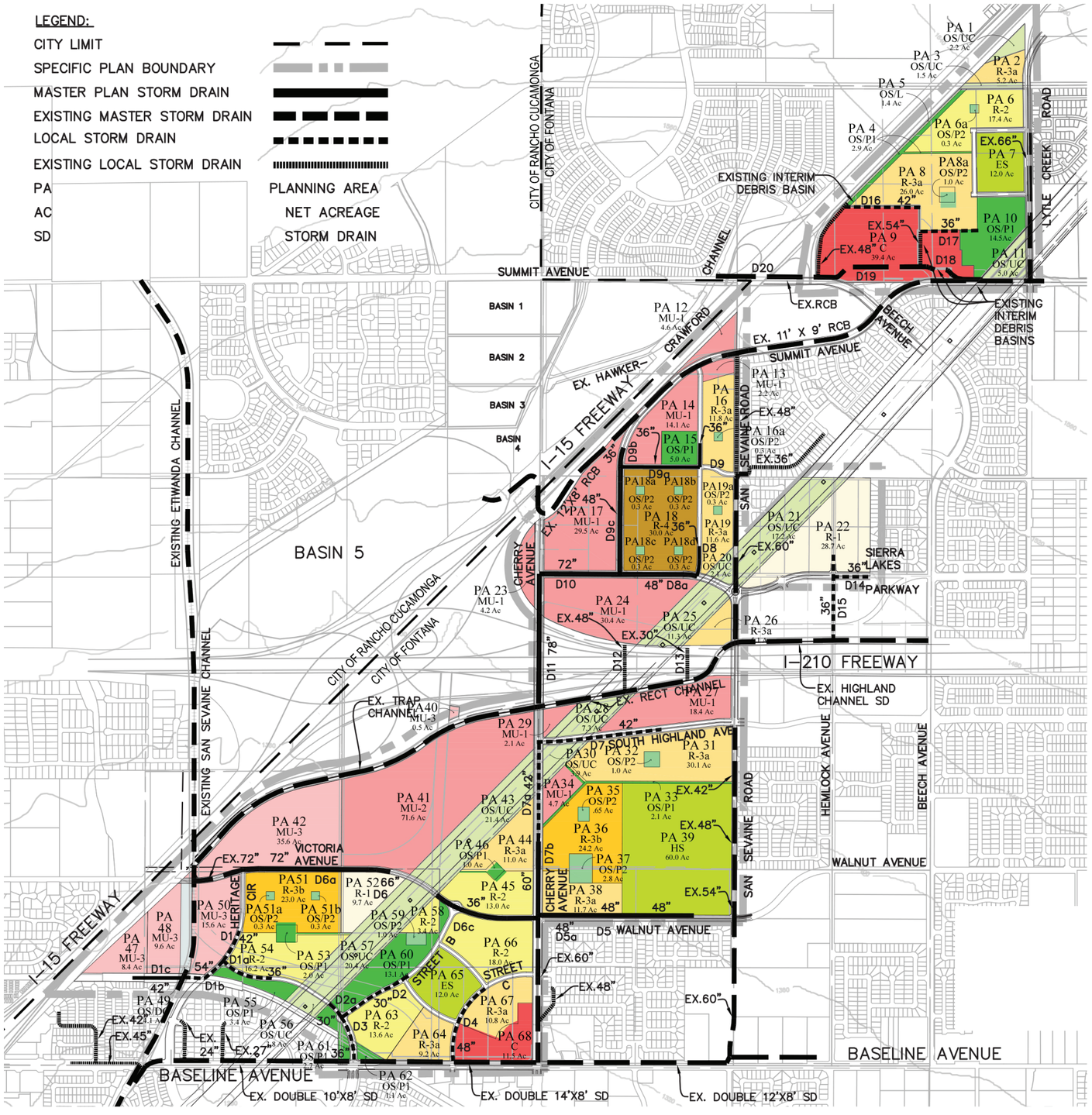
Section XI.E.5d of the MS4 Permit provides specific metrics of compliance with the Permit requirements for HCOCs as follows:

- Post-development runoff volume, time of concentration, and peak flow velocity for the two-year frequency storm does not exceed that of the predevelopment condition by more than five percent.

In order to determine if the project is within a region upstream of a HCOC, the County conducted a study of all the major storm drain facilities within the County and analyzed their susceptibility for hydromodification and HCOCs. The study titled "Hydromodification Assessment for San Bernardino County Flood Control District" prepared in January 2011 analyzed all the major flood control channels to determine their susceptibility to HCOCs, taking into account many variables including: controlled release points (dams), upstream debris basins, engineered, hardened and maintained (EHM) channels, future land use conversion and large rivers. The City of Fontana, including the project site, falls within Zone 1 based on the Hydromodification Map. All runoff from the project site drains into EHM flood control channels not susceptible to HCOCs, and there are no additional downstream channels subject to HCOCs. Based on the findings of the Hydromodification Assessment, HCOCs are not applicable to the project and therefore only LID performance criteria are applicable.[20] Although the report has been submitted as part of the WQMP documentation to the Santa Ana RWQCB, no final approval of the overall Countywide Model WQMP including this study has been obtained at the time of this assessment. Therefore, HCOC sizing is provided for the purposes of this EIR. Estimated changes in the 2-year storm event including preliminary peak flow and volume are provided to identify changes in the hydrologic condition and to estimate HCOC sizing and performance criteria in the event HCOC controls are required.

[19] *California Regional Water Quality Control Board, Santa Ana Region. (2010, January 29). Waste Discharge Requirements for the County of San Bernardino and the Incorporated Cities of San Bernardino County, Order No. R8-2010-0036, NPDES No. CAS618036, Areawide Urban Storm Water Runoff.*

[20] *RBF Consulting. "Hydromodification Assessment. Prepared for San Bernardino County Flood Control District. Submitted to the California Regional Water Quality Board Santa Ana Region." January 2011.*

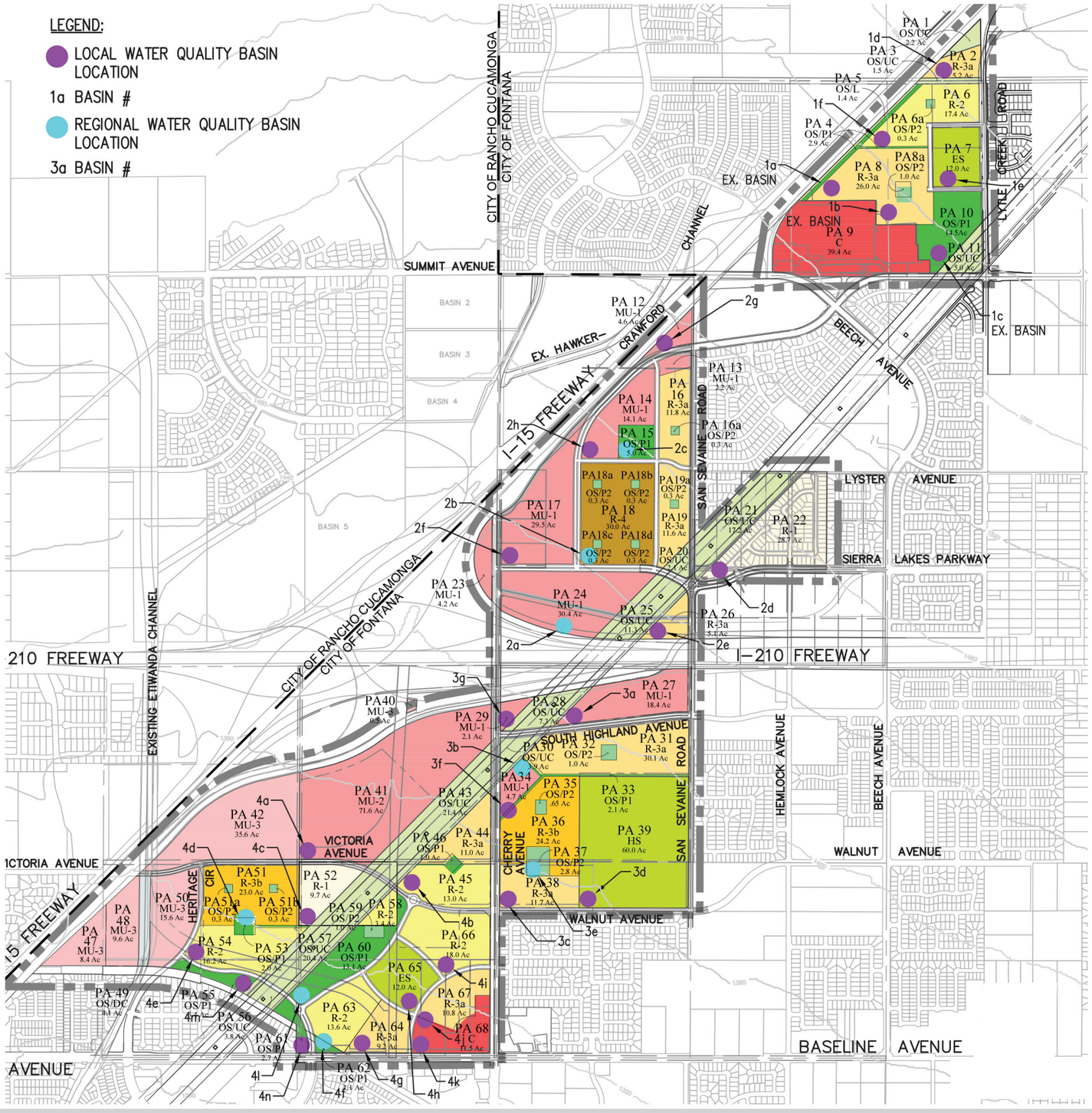


PCR

Proposed Storm Drain Master Plan

Westgate Specific Plan
Source: JHA Consulting, Inc., 2014.

FIGURE
4.I-3



0 1500 Feet

PCR

Proposed Water Quality Management Plan

Westgate Specific Plan
Source: JHA Consulting, Inc., 2014.

FIGURE
4.I-4

(a) Site Planning & Design / Hydrologic Source Controls (HSCs)

Careful consideration of site design is a critical first step in storm water pollution prevention from new developments and redevelopments. In general, site design objectives include a combination of factors that may include: minimization of impervious surfaces including roads and parking lots; preservation of native vegetation and root systems; minimization of erosion and sedimentation from susceptible areas such as slopes; incorporation of water quality wetlands, bio-infiltration swales, etc. where such measures are likely to be effective and technically and economically feasible; and minimization of impacts from storm water and urban runoff on the biological integrity of natural drainage systems and water bodies. These measures are consistent with the Ahwahnee Water Principles which promote community design, natural resources and open space, water holding areas, permeable surfaces, and recycled water. Ahwahnee Water Principles will be used as a guideline and will be implemented where feasible.[21]

In accordance with the fourth-term MS4 Permit, Countywide Model WQMP and TGD, new development and redevelopment projects are required to implement site design BMPs to minimize directly connected impervious areas and promote infiltration of runoff. The TGD for WQMPs identifies example site design BMPs to be implemented where applicable and feasible. Preventative measures associated with site planning and site design BMPs that will be applicable to the projects within the Westgate Specific Plan include:

- **Disconnect Impervious Areas.** Plan site layout and mass grading to allow runoff to be directed to permeable areas, such as natural retention areas, open spaces, medians, parking islands and planter boxes. Design roof downspouts to drain to pervious areas. Use alternative permeable or porous building materials where allowed by code.
- **Minimize Impervious Area & Maximize Natural Infiltration Capacity.** Selecting areas and designing to take advantage of a site's natural infiltration capacity. Examples include reducing development footprints by building vertically rather than horizontally, reducing road and sidewalk widths to the maximum extent practicable, clustering construction elements to preserve open space, and minimizing lot setbacks to reduce driveway lengths.
- **Preserve Existing Drainage Patterns and Increase Time of Concentration.** Includes avoiding channelization of natural drainages, using mild slopes, and using pervious channel linings to increase infiltration.

Hydrologic Source Controls (HSCs) are a class of LID features that can be considered to be a hybrid between site design practices and LID BMPs. HSCs are distinguished from site design BMPs in that they do not reduce the tributary area or reduce the imperviousness of a drainage area; rather they reduce the runoff volume that would result from a drainage area with a given imperviousness compared to what would result if HSCs were not used.

HSCs considered applicable to the project that retain runoff include:

- Impervious area dispersion

[21] *Corbett, J., Anderson, C., Davis, D. and Stoner, P. The Ahwahnee Water Principles A Blueprint for Regional Sustainability. July, 2006. Retrieved September 7, 2012, from http://water.lgc.org/guidebook.*

- Localized on-lot infiltration
- Street trees
- Residential rain barrels (optional)

Based on the high infiltration capacity of the soil, HSC's are anticipated to be a significant design measure to reduce runoff. HSC's will be incorporated and accounted for in the project-specific WQMP's. If the amount of runoff retained by the HSC's is greater or equal to the entire treatment volume for the drainage area, the area is considered to be "self-retaining" and no additional BMPs are required to treat discharges from the drainage area to meet LID requirements. All "self-treating" areas with appropriate HSC's can be subtracted for the total design capture volume (DCV) and downstream LID sizing can be adjusted downward accordingly.

(b) Low Impact Development (LID) BMPs

The goal of using LID features is to mimic the sites existing hydrology by using design measures that capture, filter, store, evaporate, detain and infiltrate runoff, rather than runoff flowing directly to piped or impervious systems. This includes directing runoff to vegetated areas and reducing the amount of impervious surfaces. Under the fourth-term MS4 Permit, new Model WQMP and TGD, an on-site feasibility analysis will be conducted during the site plan process to determine the amount of runoff that 1) can feasibly be retained (via infiltration and evapotranspiration), and 2), if not completely retained then bio-treated on-site. **Table 4.I-4**, *Low Impact Development (LID) BMP Options*, below, provides examples of the various LID features that may be used for on-site infiltration of runoff when properly sized and designed in accordance with the TGD for WQMPs and fourth-term MS4 Permit requirements.

Table 4.I-4

Low Impact Development (LID) BMP Options

Infiltration	Biotreatment
▪ Bioretention without underdrains	▪ Bioretention with underdrains
▪ Infiltration trenches	▪ Constructed wetlands
▪ Infiltration basins	▪ Wet detention basins
▪ Drywells	▪ Dry extended detention basins
▪ Underground infiltration	▪ Vegetated swales
▪ Permeable pavement	▪ Vegetated filter strips
	▪ Proprietary biotreatment

Source: CDM. (2011, July 28). San Bernardino County Stormwater Program Technical Guidance Document for Water Quality Management Plans (WQMP). Submitted to the California Regional Water Quality Board Santa Ana Region July 29, 2011

Selection of LID features for water quality treatment is based on the pollutants of concern for the specific project site and the BMP's ability to effectively treat those pollutants, in consideration of site conditions and constraints. Infiltration BMPs are considered the highest priority within the LID hierarchy due to their ability to significantly reduce storm water pollutants through runoff reduction.

Harvest and reuse of storm water runoff is not anticipated based on favorable soil conditions for infiltration and the insufficient demand to reuse the collected volume of runoff within a reasonable time (e.g., no landscape irrigation demand exists for periods longer than 1 week following a first-flush storm event). Evapotranspiration BMPs such as green roofs/blue roofs and brown roofs are also not anticipated due to the favorable soil conditions for infiltration.

The TGD for WQMPs recognizes that certain factors may limit infiltration on-site in all locations, such as presence of low-infiltrating soils or building constraints. For the Westgate Specific Plan, biotreatment BMPs will be utilized for areas if the full DCV cannot be feasible infiltrated.

(i) Infiltration BMPs

Infiltration BMPs are LID BMPs that capture, store and infiltrate storm water runoff. These BMPs are designed to store a specified volume of water and have no design surface discharge (underdrain or outlet structure) until the design volume is exceeded. These types of BMPs may also lose some water due to evapotranspiration but the main volume loss is due to infiltration.

Consistent with all LID BMP's, infiltration BMPs have the potential to fail over time when not adequately designed or maintained. Based on this certainty, an appropriate safety factor must be applied to infiltration testing results. The infiltration rate will decline between maintenance cycles as the BMP surface gets covered in fine particulates and debris thereby reducing the infiltration rates.

The methodology for assigning an appropriate infiltration factor of safety is provided in Appendix D of the TGD for WQMPs. Factors including safety factors include soil texture classification, variability of soil across a site, depth to impervious layers, tributary area size, level of pretreatment, compaction during construction and expected influent sediment loads. All infiltration BMPs must include a minimum safety factor of 2 but no greater than 9.

Infiltration BMPs include infiltration basins, infiltration trenches, bioretention with no underdrain, permeable pavement, dry well and underground infiltration galleries/chambers. The Westgate Specific Plan anticipates using a wide variety of infiltrating type BMPs in order to satisfy infiltration of the design capture volume required. During the development of project-specific site plans and Final WQMP's, infiltration BMPs will be sized in accordance with Form 4.3-3 of the TGD for WQMPs.

(ii) Biotreatment BMPs

In the event infiltration of the entire DVC is not feasible utilizing infiltration-based BMPs, the proposed project will utilize biotreatment BMPs to supplement the remaining treatment requirements.

Biotreatment BMPs are a broad class of structural LID BMPs that treat storm water using a variety of treatment mechanisms characteristic of biologically active systems to remove suspended and dissolved pollutants in storm water runoff. All biotreatment BMPs include pollutant removal mechanisms that utilize soil, plants and biological, physical and chemical processes. Biotreatment BMPs may either be volume-based or flow-based and are designed to treat and discharge runoff to a downstream conveyance system. Biotreatment BMPs should be designed to maximize infiltration and evapotranspiration even though they will result in the discharge of runoff.

Biotreatment BMPs include bioretention with underdrains, vegetated swales, vegetated filter strips, dry extended detention basin with vegetation enhancement, constructed wetland and proprietary biotreatment.

(c) LID Sizing vs. HCOC Infiltration Sizing per Planning Area

In order to evaluate conformance with WQMP requirements at the Specific Plan and Program EIR level, preliminary LID sizing and HCOC sizing assuming infiltration basins for each major planning area are provided below. Although HCOCs are not considered applicable based on the stable EHM channels downstream, preliminary volume estimates are provided below. Infiltration basin sizing for LID is based on the WEF Manual formula,[22] and infiltration basin sizing for HCOC are based on the estimated volume difference between the pre-development and post-development 2-year storm event. In all cases, the water quality volume (LID volume) exceeds the 2-year HCOC volume and therefore infiltration basin sizing estimates per planning area have been sized off the LID volume.

The results indicate that for Planning Area 1, approximately 4.6 acres should be set aside for infiltration basins or 3.1 percent of the total development area. One infiltration basin per Planning Area will likely be broken up into smaller basin sizes and distributed accordingly within the development footprint. In certain instances, infiltration basins may be situated within open space areas or located in recreational areas downstream of more than one development area to serve as a regional infiltration basin. In other cases, infiltration basins will be incorporated into each land use at the local basin level. In all cases, detailed water quality volumes will be provide upon the approved site plan(s) for each planning area and estimated infiltration basin sizing and locations will be revised accordingly. Attachment G of the *Hydrology and Water Quality Technical Report* identifies potential locations of local infiltration basins per land use and regional basins serving multiple land uses.

(d) Regional Systems, Alternative Approaches & Treatment Control BMPs

The use of one major regional infiltration BMP for the entire project is not considered feasible due to the spatial constraints and ability to direct low flows to one centralized downstream location from all the development areas. Alternative approaches and treatment control BMPs are not anticipated due to the high potential for infiltration based on the soil conditions.

(e) Source Control BMPs

Source control BMPs effectively minimize the potential for typical urban pollutants to come into contact with runoff, thereby limiting water quality impacts downstream. This includes both non-structural measures (designated with an "N" below), such as activity restrictions, maintenance, and training practices, and structural measures (designated with an "S" below) , such as material storage area and loading dock design features. A list of potential source control measures are provided below as identified in the County's TGD for WQMPs:

[22] *The volume of annual runoff produced by the 85th percentile, 24-hour rainfall event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998).*

- **(N1) Education for Property Owners, Tenants, and Occupants.** Educational materials related to urban runoff can be provided to tenants/homeowners (via project owner, homeowner association [HOA], and/or property owner association [POA]) and employees to reduce pollutants from reaching the storm drain system. Examples of environmental awareness materials include, but are not limited to: guidelines for landscaping and gardening, tips for pet care, vehicle cleaning, and proper disposal of household hazardous waste.
- **(N2) Activity Restrictions.** Activity restrictions can be developed to restrict activities that have the potential to create adverse impacts on water quality. Activities include but are not limited to: the handling and disposal of contaminants, trash management and litter control, irrigation and landscaping practices, vehicle and equipment cleaning, fertilizer applications and household waste management practices.
- **(N3) Landscape Management (CASQA BMP Handbook SC-73).** Common area landscape management that includes minimizing fertilizer and pesticide application in accordance with local requirements, use of slow-release fertilizers, maintenance activities, providing education to homeowners and tenants (via project owner, HOA and/or POA), and providing education and training for employees on management of landscape materials and storm water management.
- **(N4) BMP Maintenance.** The owners, HOAs and/or POAs of the individual project sites will be responsible for the implementation and maintenance of each applicable non-structural BMP, as well as scheduling inspections and maintenance of all applicable structural BMP facilities through its landscape contractor and any other necessary maintenance contractors for the project site. In addition, the project owner will be required to verify treatment control BMP implementation and ongoing maintenance through inspection, self-certification, survey, or other equally effective measure. The certification shall verify that, at a minimum, the inspection and maintenance of all structural BMPs including inspection and performance of any required maintenance in the early fall, prior to the start of the rainy season, and in accordance with frequencies outlined in the project-specific WQMP prepared for each phase of development.
- **(N5) Title 22 CCR Compliance.** Where applicable, project sites shall comply with Title 22 of the California Code of Regulations (CCR) and relevant sections of the California Health and Safety Code regarding hazardous waste management, which will be enforced by County Environmental Health on behalf of the State.
- **(N6) Local Water Quality Ordinance.** Projects must comply with any applicable local water quality ordinances to ensure clean storm water discharges from fuel dispensing areas or other areas of concern to public properties.
- **(N7) Spill Contingency Plan (CASQA BMP Handbook SC-11).** Any facilities that store liquid materials or wastes shall maintain procedures for spill response and cleanup activities. Emergency spill kits shall be kept on-site at all times. Activities will be coordinated between the respective departments and the Police and Fire departments in the event of a spill.
- **(N8) Underground Storage Tank Compliance.** Any underground storage tanks proposed shall meet applicable Federal, State, County, and local regulations.
- **(N9) Hazardous Materials Disclosure Compliance.** Any projects that store or utilize hazardous wastes, where applicable, shall comply with the local fire authority hazardous material disclosure requirements.

- **(N10) Uniform Fire Code Implementation.** The owner, HOA and/or POA shall ensure all structures comply with Article 80 of the Uniform Fire Code, City codes, local fire authority, and local standards.

- **(N11) Common Area Litter Control (CASQA BMP Handbook SC-60).** Includes regular litter control for the entire project area including trash pick-up and sweeping of littered common areas, as performed by the maintenance crew. In addition, pet waste receptacles should be provided throughout the project site where applicable.

- **(N12) Employee Training.** Employees of the owner, HOA and/or POA, as well as any contractors of the aforementioned entities will require training to ensure that employees are aware of maintenance activities that may result in pollutants reaching the storm drain. Example training topics include proper storage and use of fertilizers and pesticides, or training on the implementation of hazardous spill contingency plans.

- **(N13) Housekeeping of Loading Docks (CASQA BMP Handbook SD-31).** Loading dock housekeeping measures will be implemented where applicable to keep the areas clean and orderly condition.

- **(N14) Common Area Catch Basin Inspection (CASQA BMP Handbook SC-74).** Includes routine maintenance of all catch basins, grate inlets, etc. for debris and litter removal. For industrial/commercial developments and developments with privately-maintained drainage systems, the owner is required to have at least 80 percent of drainage facilities inspected, cleaned and maintained on an annual basis with 100 percent of the facilities included in a two-year period. Cleaning should take place in the late summer/early fall, prior to the start of the storm season. Drainage facilities include catch basins (storm drain inlets), detention basins, retention basins, sediment basins, open drainage channels and lift stations.

- **(N15) Vacuum Street Sweeping Private Streets and Parking Lots (CASQA BMP Handbook SC-43, SC-70).** Street sweeping of all impervious streets and parking lots performed at a frequency that reduces or prevents sediment and debris from entering receiving waters and prior to the rainy season or as equivalent as required by the local agency.

- **(N16) Other Non-structural Measures for Public Agency Projects.** Other non-structural measures shall be implemented and included in the project WQMP(s) as applicable for new public agency priority projects as required by the local jurisdiction.

- **(N17) Other NPDES Permits, As Applicable.** Includes compliance with other NPDES permits as applicable, such as General Industrial Permits, etc., to include BMPs that are required as part of a SWPPP.

- **(S1) Provide Storm Drain Stenciling and Signage (CASQA BMP Handbook SD-13).** Storm drain stenciling or signage on all catch basins with highly visible source control messages (e.g., "No Dumping – Flows to Creek").

- **(S2) Design Outdoor Hazardous Material Storage Areas to Reduce Pollutant Introduction (CASQA BMP Handbook SD-34).** Any areas proposed for outdoor hazardous material storage shall be paved accordingly and storage bins will include sidewalls to contain the materials. There will be a drainage grate along the front of the storage bins with an outlet screen that traps material to prevent pollutants from entering the storm drain. Any hazardous materials shall be stored in storage cabinets, sheds or enclosures that meet all applicable regulations.

- **(S3) Design Trash Enclosures to Reduce Pollutants (CASQA BMP Handbook SD-32).** All trash and waste shall be stored in containers that have lids or tarps to minimize direct precipitation into the containers. The storage areas shall be paved, and either be sloped or include a barrier to keep drainage out of the storm drain.

- **(S4) Use Efficient Irrigation Systems and Landscape Design (CASQA BMP Handbook SD-12).** Installing and maintaining efficient irrigation systems designed to minimize water by eliminating overspray to hardscape areas, and setting irrigation timing and cycle lengths in accordance with water demands, given time of year, weather, and day and night temperatures. Where feasible, incorporation of native tolerant species for landscaping, protection of slopes and efficient irrigation. May be used in conjunction with educational materials to homeowners/tenants as well as activity restrictions. The irrigation systems shall be in conformance with local water use efficiency guidelines and ordinances.

- **(S5) Finished Grade of Landscaped Areas.** Includes grading of landscaped pockets, fingers, setback areas, parkway strips, street medians, etc. at a minimum of 2 inches below top of curb or sidewalk for increased retention/infiltration of storm water and irrigation water.

- **(S6) Protect Slopes and Channels.** The site drainage design shall include appropriate BMPs to decrease the potential for erosion of slopes and/or channels. The design shall be consistent with Federal, State, and local standards (e.g., RWQCB, ACOE, CDFG). Where feasible, the following principles shall be considered: 1) convey runoff safely from the tops of slopes, 2) avoid disturbing steep or unstable slopes, as well as natural channels, 3) implement a permanent stabilization BMP on disturbed slopes and channels as quickly as possible, such as native vegetation, and 4) install energy dissipaters at the outlets of new storm drains, culverts, or channels.

- **(S7) Loading Dock Areas (CASQA BMP Handbook SD-31).** Any new loading docks shall be built at-grade, generally draining away from the buildings towards the drive aisles. In addition, loading dock housekeeping measures shall be implemented where applicable to keep the areas clean and orderly condition. Direct connections to the municipal storm drain system from below grade loading docks (truck wells) or similar structures are prohibited.

- **(S8) Maintenance Bays (CASQA BMP Handbook SD-31).** Any maintenance bays proposed shall be designed in accordance with TGD standards. Examples include locating facilities indoors, and draining nuisance flows to an oil/water separator that is connected to the sanitary sewer system.

- **(S9) Vehicle Wash Areas (CASQA BMP Handbook SD-33).** Any vehicle wash areas proposed shall be designed in accordance with TGD standards. Vehicle wash areas shall be self-contained or covered, equipped with a wash rack and clarifier or other pretreatment facility. Discharge from a vehicle wash area to the storm drain system is prohibited.

- **(S10) Outdoor Processing Areas (CASQA BMP Handbook SD-36).** Any outdoor processing areas proposed shall be designed in accordance with TGD standards. Areas shall be enclosed and covered to preclude storm water, and not be allowed to discharge into the storm drain system.

- **(S11) Equipment Wash Areas.** Any equipment wash areas proposed shall be designed in accordance with TGD standards. Examples include designing the area to be self-contained and covered, preventing the runoff from entering the storm drain system with berms or containment structures, and collecting runoff in a sump for disposal. Discharge from an equipment wash area to the storm drain system is prohibited.

- **(S12) Fueling Areas (CASQA BMP Handbook SD-30).** Any fueling areas proposed shall be designed in accordance with City and TGD standards. Any fueling areas proposed for the project site shall implement, where feasible the following measures: (1) maintaining clean fuel-dispensing areas, (2) appropriately designed fueling areas to minimize storm water exposure, (3) minimization of pooling of water, (4) utilization of fueling safeguards, (5) regular inspections of fueling equipment, (6) spill kits on-site (7) underground storage tanks fit with spill containment and overflow prevention systems that meet regulations of Section 2635(b) of Title 23 of the Code of California Regulations, (8) canopy to eliminate direct precipitation and grade breaks to reduce runoff and runoff, and (9) a posted notice to remind employees not to top off fuel tanks. Additionally, the fueling stations shall have an oil/water separator to treat pollutants discharged into the sewer system.

- **(S13) Site Design and Landscape Planning (Hillside Landscaping) (CASQA BMP Handbook SD-10).** The owner shall be responsible for the vegetative establishment on all manufactured or disturbed slopes with a mixture of native species and approved ornamentals by the City.
- **(S14) Wash Water Controls for Food Preparations Areas.** Any food preparation facilities proposed shall meet all health and safety, building and safety and any other applicable regulations, codes requirements. Discharge of wash water from food preparation areas to the storm drain system is prohibited.
- **(S15) Community Car Wash Racks.** Any community car wash racks proposed shall be designed in accordance with City and TGD standards. Wash waters from area may be directed to the sanitary sewer (with approval), to an engineered infiltration system, or an equally effective alternative. Discharge from a wash area to the storm drain system is prohibited.

(2) Water Quality

The overall approach to water quality treatment for the individual projects associated with the Westgate Specific Plan will include incorporation of site design/LID strategies and source control measures in a systematic manner that maximizes the use of LID features to provide treatment of storm water and reduce runoff. In accordance with the fourth-term MS4 Permit for San Bernardino County, the use of LID features will be consistent with the prescribed hierarchy of treatment provided in the Permit, including techniques to infiltrate, filter, store, evaporate, or retain runoff close to the source of runoff. For those areas of the site where LID features are not feasible or do not meet the feasibility criteria, treatment control BMPs with biotreatment enhancement design features will be utilized to provide treatment. LID features will be sized to infiltrate the required design capture volume (DCV) to reduce impacts pollutant and runoff volumes to downstream receiving waters. Consistent with regulatory requirements and design guidelines for water quality protection, the following principles are being followed for the project and will be supported by construction level documents in the final Water Quality Management Plans (WQMPs) per each phase of development and prior to grading permit(s) issuance by the City of Fontana:

- Where feasible, LID features will be sized for water quality treatment credit according to local Regional Board sizing criteria as defined in the fourth-term MS4 Permit for either flow-based or volume-based BMPs. There will be a significant effort to integrate LID techniques within the internal development areas (site design objectives), thereby providing treatment of low-flow runoff directly at the source and runoff reduction of small (i.e., more frequent) storm event runoff (first-flush). In most instances, LID features will be sized by volume-based analyses to demonstrate compliance with

the required design capture volume for the individual projects associated with the Westgate Specific Plan.

- Detailed drainage calculations, grading, and confirmation of sizing to occur during the detailed design phase and subsequent WQMP documentation. Consistent with the fourth-term MS4 Permit, LID/BMP sizing methodology will follow the WEF Manual formula, which is the "volume of annual runoff produced by the 85th percentile, 24-hour rainfall event determined as the maximized capture storm water volume for the area," from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998).

- Based on known soil conditions from regional sources, other development projects in the region and discussions with City staff, soils exhibit good infiltration rates (design rate of 5-7 in/hour). Based on these conditions, LID features will be designed to infiltrate runoff on-site in accordance with feasibility criteria as defined in the new Countywide Model WQMP (submitted to the RWQCB May 2011) and associated TGD.[23]

- In certain areas of the project, infiltration may not be feasible based on localized soil conditions or other constraints such as utilities or setbacks from buildings. Harvest and use BMPs will be evaluated for these areas but are not anticipated to meet the minimum feasibility requirements based on the imbalance between demand and supply. For these areas, biotreatment BMPs will be utilized and sized accordingly.

d. Analysis of project Impacts

(1) Surface Water Hydrology

(a) Proposed Hydrologic Conditions

(i) On-Site Hydrology

The purpose of the proposed conditions evaluation is to determine potential impacts associated with the development of the project. The proposed Westgate Specific Plan project includes the removal of several existing interim debris basins and development of residential, commercial retail, schools, open space and roadways. Attachment A is the proposed Site Plan for the Westgate project.

Under proposed conditions, storm water runoff will flow in similar patterns to existing conditions, generally flowing south and west towards existing storm drain facilities. New storm drain facilities will be constructed on-site to convey runoff to the existing storm drain lines that traverse from north to south and east to west through the project site. All project runoff will flow to the existing regional flood control facilities that are currently accepting runoff from the undeveloped condition.

As stated previously in Section 2.1.2, the proposed project is divided up into four primary planning areas and is served by four (4) existing master planned facilities. Attachment B of the *Hydrology and Water Quality Technical Report* provides a summary of the planning areas and master planned facilities.

[23] *CDM. (2011, July 28). San Bernardino County Stormwater Program Technical Guidance Document for Water Quality Management Plans (WQMP). Submitted to the California Regional Water Quality Board Santa Ana Region July 29, 2011.*

Planning Area 1 includes the most northerly development area north of Summit Avenue, west of Lytle Creek Road and east of the I-15. Planning Area 1 includes an existing 40-acre commercial retail center at the southwestern corner and proposed land uses include residential, open space and a school. Planning Area 1 primarily drains into the Summit Avenue Storm Drain, a regional 12' x 8' RCB that drains east to west towards the I-15 freeway, turns southerly along the south side of the I-15 and then crosses under the freeway at Cherry Avenue and drains into Sevaine Basin #5. A portion of the flows will also drain into the Hawker-Crawford Channel which connects into Basin #3.

Planning Area 2 includes the development area south of Planning Area 1 and is located west of San Sevaine Road, east of Cherry Avenue and north of N. Frontage Road adjacent to the I-15. Planning Area 2 will consist primarily of business parks with some open space and residential abutting the business park uses. The area will be served by the Highland Channel, a primarily existing concrete open channel with an enclosed portion related to the undercrossing at San Sevaine Road. The Highland Channel ultimately ties into the San Sevaine Channel downstream.

Planning Area 3 includes the development area east of Cherry Avenue, west of San Sevaine Road and north of Walnut Avenue. Planning Area 3's largest land use includes a proposed high school with open space, residential and business park for the remainder of the planning area. Planning Area 3 will drain into either the Baseline Avenue Storm Drain or the San Sevaine Channel directly. The Baseline Avenue storm drain ultimately ties into San Sevaine Channel at the southern end of the project site.

Planning Area 4 includes the most southern development area and is bounded by Cherry Avenue to the east, Baseline Avenue to the south, Highland Channel to the north and I-15 to the west. Planning Area 4 land uses include the utility open space corridor that bisects the planning area, business parks to the west, residential, and commercial. Similar to Planning Area 3, runoff will drain to either the Baseline Avenue storm drain or the San Sevaine Channel.

The project includes a variety of connections to these existing flood control facilities. All of the major existing proposed and regional facilities (30" or greater) are provided on the Storm Drain Master Plan exhibit (Attachment E). Attachment F provides a summary of the existing and proposed hydrology calculations and assumptions for preparing the preliminary calculations. **Table 4.I-5**, *Summary of Proposed Hydrologic Conditions*, below, summarizes the proposed runoff conditions as compared to the existing conditions. Given the similarity in impervious surface area associated with business park uses and high density residential uses, stormwater volumes and flow rates are not anticipated to vary substantially between these land use types on up to 20.0 acres within Planning Area 24.

Under the proposed condition, runoff rates will increase significantly over existing conditions. In order to ensure runoff is conveyed from the project site to off-site regional flood control facilities, on-site storm drain systems must be appropriately sized. Hall & Foreman prepared a planning level hydrology analysis to determine preliminary sizing and alignments for the storm drain infrastructure required to support the Westgate development plan. Peak flow discharges, preliminary sizing and alignments for a 25-year storm event were provided for the proposed condition. Refer to Exhibit 4.I-3 for additional details regarding peak flow discharges.

Table 4.I-5

Summary of Proposed Hydrologic Conditions

			Peak Discharge Rate (cfs)		
	Acreage	Imperviousness	2-Year	25-Year	100-Year
Planning Area 1					
Existing Conditions	148.8 ac	29%	109.3	248.4	317.9
Proposed Conditions	148.8 ac	66%	141.0	320.5	410.2
Primary Flood Control Facility	Hawker - Crawford Channel (Basin #3); Summit Avenue Storm Drain (Basin #5)				
Planning Area 2					
Existing Conditions	235.2 ac	5%	132.8	301.9	386.4
Proposed Conditions	235.2 ac	72%	242.6	551.3	705.7
Primary Flood Control Facility	San Sevaine Basin #5; Highland Channel				
Planning Area 3					
Existing Conditions	192.5 ac	5%	110.1	250.3	320.3
Proposed Conditions	192.5 ac	65%	210.5	478.4	612.4
Primary Flood Control Facility	San Sevaine Channel; Baseline Avenue Box Culvert				
Planning Area 4					
Existing Conditions	324.9 ac	5%	182.5	414.7	530.8
Proposed Conditions	324.9 ac	57%	297.1	675.3	864.4
Primary Flood Control Facility	San Sevaine Channel; Baseline Avenue Box Culvert				

cfs = cubic feet per second

Source: Hall & Foreman, Inc. Westgate Specific Plan Infrastructure Study, January 2011.

(ii) Regional Hydrology

In order to ensure runoff is safely conveyed from the project to downstream regional flood control facilities, it is important that the facilities have been sized to accommodate the upstream development.

Regional scale flood control improvements generally follow the City of Fontana Master Plan of Drainage (MPD). Since the time the MPD was completed, a number of the MPD facilities have been constructed (e.g., Summit Storm Drain, Highland Channel, Baseline Ave RCB). Each of these facilities was designed based on specific hydrology and hydraulics for that particular project. They followed the MPD as a guideline for tributary areas and design storm interval although certain facilities design capacity deviated from the MPD. For example, the Baseline RCB was originally assumed to be designed for a 25-year event in the MPD but was ultimately constructed to convey a 100-year design event. The constructed facilities were designed based on developed land uses that assumed build out of the City's General Plan, which included the Westgate project.

The design of future drainage facilities within the Westgate Specific Plan shall ensure that flows from the project area are within the design parameters of downstream completed facilities. If for some reason, a particular area of Westgate will generate peak flows greater than the capacity of the downstream facility, then that area will be responsible for attenuating their flows through on-site detention or some other means.

(b) Site Drainage Patterns and Flooding

Threshold	Would the project substantially alter the existing drainage pattern of the site, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

Impact 4.I-1 Implementation of the proposed project would not substantially alter the existing drainage pattern of the site, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. This impact is considered less than significant.

The proposed project will substantially increase the rate and volume of runoff as compared to the existing condition. In order to safely convey runoff to downstream facilities and prevent flooding on-site and off-site, both the on-site and off-site storm drain systems must be properly sized for the expected rates and volumes. A preliminary analysis was performed and storm drain facilities were sized for a 25-year storm event consistent with local drainage criteria. A detailed storm drain and hydrology analysis including hydraulic modeling will be performed as part of the final engineering documents to confirm pipe sizes, connections and 100-year flood conveyance. In addition, the detailed hydrology analysis will be required to confirm that the downstream regional flood control facility has the capacity to accept the projected runoff conditions and if capacity is limited, the proposed project will have to control peak flows on-site to the downstream capacity. This scenario is not anticipated as the existing regional flood control facilities were sized based upon full build-out of the General Plan which includes the Westgate property. Impacts related to on-site and off-site flooding are less than significant.

(c) Storm Drain Capacity

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?

Impact 4.I-2 Implementation of the proposed project would not 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. This impact is considered less than significant.

All project runoff will be collected and discharged into existing regional flood control facilities that were sized upon full build-out of the General Plan which includes the Westgate property. In addition, the proposed project will be required to develop detailed storm drain and hydrology analyses to confirm the regional flood control facilities can accommodate the projected peak flow events. The implementation plan includes a series of LID BMPs and features that will utilize the highly permeable native soil properties to infiltrate the first 85th percentile storm event and prevent the "first flush" pollutants from leaving the project site and entering the downstream facilities. Infiltration BMPs are discussed further in Section 4.2.2. Implementation of infiltration based BMPs will result in less than significant impacts to downstream receiving waters.

(d) Floodplains and Flood Zones

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? Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Impact 4.I-3 Implementation of the proposed project would not 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, or place within a 100-year flood hazard area structures which would impede or redirect flood flows. This impact is considered less than significant.

The Westgate Specific Plan does not propose any housing within a 100-year floodplain based on the FIRM maps or flood hazard delineation maps. Additionally, no proposed improvements associated with the project would be located within a 100-year floodplain that would impede or redirect flood flows. Impacts to flooding are considered less than significant.

(e) Levee or Dam Failure

Threshold	Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Impact 4.I-4 Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. This impact is considered less than significant.

The Westgate Specific Plan is not subject to flooding as a result of a failure of a levee or dam as there are no major dams or levees upstream or within the project vicinity. Impacts are considered less than significant.

(2) Groundwater Hydrology

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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?

Impact 4.I-5 Implementation of the proposed project would not 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted. This impact is considered less than significant.

The proposed project will not utilize local groundwater wells for water supply. However, as noted in the Water Supply Assessments (WSAs) for the proposed project (Appendix K of this Draft EIR), potable water

will be provided to proposed future uses by the Fontana Water Company (FWC) and the Cucamonga Valley Water District (CVWD), which utilize groundwater sources in Chino Basin, Cucamonga Basin, Rialto Basin, Lytle Basin, and the No-Man's Land Basin (an unnamed basin between the Chino Basin and the Rialto Basin), for a substantial portion of domestic water supplies within their respective service areas. While these groundwater basins are utilized by these and other water purveyors in the area for a portion of their water supplies, each respective agency is limited to the amount of water that may be extracted from each basin without substantially reducing the productivity of water supply wells, otherwise referred to as the "safe yield", the limits of which are regulated through various agreements between agencies, adjudicated rights from court decisions, and other mechanisms that preclude overdraft of groundwater resources. Additionally, given these established extraction limits, as well as limits on other sources of water such as surface water from Lytle Creek, fluctuations in water demands in each respective service area of FWC and CVWD are met primarily through imported water supplies from the SWP and Colorado River. As such, since future demands for water supply would be addressed through increased deliveries of imported water, as groundwater extractions are strictly limited to safe yield volumes, project-related water demand would not have the potential to result in excessive groundwater withdrawals such that a lowering of the local groundwater table would occur. Impacts associated with depletion of groundwater supplies due to increased demand for groundwater resources are considered less than significant.

Under existing conditions, groundwater recharge occurs through the pervious surfaces and highly permeable soils. Under the proposed condition, LID BMPs and features will be required to infiltrate the 85th percentile storm event for the entire development area to ensure groundwater recharge occurs after project implementation. Infiltration BMPs are discussed further below under Post-Construction Activities. The use of infiltrating LID BMPs and features will result in a less than significant impact to groundwater recharge.

(3) Water Quality

(a) Proposed Water Quality Conditions

(i) Construction Activities

Clearing, grading, excavation and construction activities associated with the proposed project may impact water quality due to sheet erosion of exposed soils and subsequent deposition of particulates in local drainages. Grading activities, in particular, lead to exposed areas of loose soil, as well as sediment stockpiles, that are susceptible to uncontrolled sheet flow. Although erosion occurs naturally in the environment, primarily from weathering by water and wind action, improperly managed construction activities can lead to substantially accelerated rates of erosion that are considered detrimental to the environment.

Prior to the issuance of grading permits, the applicants shall provide evidence that the development of the projects as part of the Westgate Specific Plan shall comply with the most current General Construction Permit (CGP) and associated local NPDES regulations to ensure that the potential for soil erosion is minimized on a project-by-project basis. In accordance with the CGP (Order No. 2009-0009-DWQ), the following Permit Registration Documents (PRDs) are required to be submitted to the SWRCB prior to commencement of construction activities:

- Notice of Intent (NOI)
- Risk Assessment (Standard or Site-Specific)

- Particle Size Analysis (if site-specific risk assessment is performed)
- Post-Construction Water Balance (if applicable)
- Site Map
- SWPPP
- Active Treatment System (ATS) Design Documentation (if ATS is determined necessary)
- Annual Fee & Certification

In accordance with the existing and updated CGP, construction SWPPPs must be prepared and implemented at the project sites, and revised as necessary, as administrative or physical conditions change. The SWPPPs must be made available for review by the RWQCB, upon request, and must describe construction BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. These include, but are not limited to: erosion controls, sediment controls, tracking controls, non-storm water management, materials & waste management, and good housekeeping practices.[24] The above-mentioned BMPs for construction activities are briefly discussed below.

- Erosion control BMPs, such as hydraulic mulch, soil binders, and geotextiles and mats, protect the soil surface by covering and/or binding the soil particles. Temporary earth dikes or drainage swales may also be employed to divert runoff away from exposed areas and into more suitable locations. If implemented correctly, erosion controls can effectively reduce the sediment loads entrained in storm water runoff from construction sites.
- Sediment controls are designed to intercept and filter out soil particles that have been detached and transported by the force of water. All storm drain inlets on the project site or within the project vicinity (i.e., along streets immediately adjacent to the project boundary) should be adequately protected with an impoundment (e.g., gravel bags) around the inlet and equipped with a sediment filter (e.g., fiber roll). They should also be placed around areas of soil disturbing activities, such as grading or clearing.
- Stabilize all construction entrance/exit points to reduce the tracking of sediments onto adjacent streets and roadways. Wind erosion controls should be employed in conjunction with tracking controls.
- Non-storm water management BMPs prohibit the discharge of materials other than storm water, as well as reduce the potential for pollutants from discharging at their source. Examples include avoiding paving and grinding operations during the wet season where feasible, and performing any vehicle equipment cleaning, fueling and maintenance in designated areas that are adequately protected and contained.
- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into storm water discharges.

[24] *California Stormwater Quality Association (CASQA). Stormwater Best Management Practice Handbook Portal: Construction. November 2009.*

Prior to commencement of construction activities, the individual project-SWPPPs will be prepared in accordance with the site specific sediment risk analyses based on the final rough grading plans and erosion and sediment controls proposed for each phase of construction for each project. The phases of construction will define the maximum amount of soil disturbed, the appropriate sized sediment basins and other control measures to accommodate all active soil disturbance areas and the appropriate monitoring and sampling plans.

(ii) Post-Construction Activities

Predicted Pollutants and Sources

The pollutants of concern for water quality are those pollutants that are anticipated (expected) or potentially could be generated by the project, based on past and proposed land uses, along with those pollutants that have been identified by regulatory agencies as potentially impairing beneficial uses in receiving water bodies. Based on the various land uses for the Westgate Specific Plan, the pollutants of concern can be divided up into anticipated pollutants and potential pollutants. **Table 4.I-6**, *Anticipated and Potential Pollutants Generated by Land Use Type*, derived from the Technical Guidance Document for Water Quality Management Plans (TGD for WQMPs), summarizes typical pollutants of concern for major land uses and project categories, including those that are proposed for the Westgate Specific Plan.

Bacteria/Pathogens. Elevated pathogens are typically caused by the transport of human or animal fecal wastes from the watershed. Runoff that flows over land such as urban runoff can mobilize pathogens, including bacteria and viruses. Even runoff from natural areas can contain pathogens (e.g., from wildlife, plant matter, and soils). Other sources of pathogens in urban areas include pets and leaky sanitary sewer pipes. The presence of pathogens in runoff can impair receiving waters. Total and fecal coliform, enterococcus bacteria, and E. coli bacteria are commonly used as indicators for pathogens due to the difficulty of monitoring pathogens directly.

Metals. The primary sources of trace metals in storm water are metals typically used in transportation, buildings and infrastructure and also paints, fuels, adhesives and coatings. Copper, lead, and zinc are the most prevalent metals typically found in urban runoff. Other trace metals, such as cadmium, chromium, mercury are typically not detected in urban runoff or are detected at very low levels.[25] Trace metals have the potential to cause toxic effects on aquatic life and are a potential source of groundwater contamination.

Nutrients. Nutrients are inorganic forms of phosphorous and nitrogen. The main sources of nutrients in urban areas include fertilizers in lawns, pet wastes, failing septic systems, and atmospheric deposition from automobiles and industrial operations. The most common impact of excessive nutrient input is eutrophication of the receiving water body, resulting in excessive algal production, hypoxia or anoxia, fish kills and potential releases of toxins from sediment due to changes in water chemistry profiles.

Noxious Aquatic Plants. Noxious aquatic plants are invasive plants with respect to a particular ecosystem that are not found in the ecosystem and whose presence in the environment causes economic or environmental harm or harm to human health.

[25] *Los Angeles County, Department of Public Works. (2000, September). Los Angeles County 1994–2000 Integrated Receiving Water Impacts Report. Retrieved January 27, 2009, from http://ladpw.org/WMD/npdes/IntTC.cfm*

Table 4.I-6

Anticipated and Potential Pollutants Generated by Land Use Type

Project Categories and/or Features	Pathogens (Bacteria/ Virus)	Heavy Metals	Nitrogen	Phosphorous	Toxic Organic Compounds	Suspended Solids/ Sediments	Trash & Debris	Oil & Grease
Detached Residential Development	E	N	E	E	E[a]	E	E	E
Attached Residential Development	E	N	E	E	E[a]	E	E	E[b]
Commercial/Industrial Development	E[c]	E	E[a]	E[a]	E[a,d]	E[a]	E	E
Automotive Repair Shops	N	E	N	N	E[a,c,d]	N	E	E
Restaurants (≥5,000 s.f.)	E	E[b]	E[a]	E[a]	E[a]	E[a,b]	E	E
Hillside Development (≥5,000 s.f.)	E	N	E	E	E[a]	E	E	E
Parking Lots (≥5,000 s.f.)	E[e]	E	E[a]	E[a]	E[c]	E[a]	E	E
Retail Gasoline Outlets	N	E	N	N	E[e]	N	E	E

E = Expected to be a concern in storm water runoff N = Not expected to be a concern in storm water runoff

[a] *Expected pollutant if landscaping exists on-site; otherwise not expected.*

[b] *Expected pollutant if the project includes uncovered parking areas; otherwise not expected.*

[c] *Including petroleum hydrocarbons.*

[d] *Including solvents.*

[e] *Bacterial indicators are routinely detected in pavement runoff.*

Source: CDM. (2011, July 28). Technical Guidance Document for Water Quality Management Plans (WQMP). Draft submitted to the Santa Ana RWQCB.

Pesticides. Pesticides (including herbicides) are chemical compounds commonly used to control insects, rodents, plant diseases, and weeds. Excessive application of a pesticide or impractical application of pesticides (i.e., right before rain events) may result in runoff containing toxic levels to receiving water bodies and the microorganisms.

Polychlorinated Biphenyls (PCBs). PCBs are synthetic chemicals that were manufactured for use in various industrial and commercial applications – including oil in electrical and hydraulic equipment, and plasticizers in paints, plastics and rubber products – because of their non-flammability, chemical stability, high boiling point and electrical insulation properties. When released into the environment, PCBs do not easily break apart. Instead, they persist for many years, bioaccumulate and bioconcentrate in organisms. The US EPA has classified PCBs as probable human carcinogens. Long-term effects of PCB exposure include harm to the nervous and reproductive system, immune system suppression, hormone disruption and skin and eye irritation.

Organic Compounds. Organic compounds are carbon-based, and are typically found in pesticides, solvents, and hydrocarbons. Dirt, grease, and other particulates can also adsorb organic compounds in rinse water from cleaning objects, and can be harmful or hazardous to aquatic life either indirectly or directly.

Sediment/Turbidity. Sheet erosion and the transport and deposition of sediment in surface waters can be a significant form of pollution that may result in water quality problems. Increases in runoff velocities and volumes can cause excessive stream erosion and sediment transport altering the sediment equilibrium of a stream or channel. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom-dwelling organisms, and suppress aquatic vegetation growth. Excessive fine sediment, such as total suspended solids (TSS), can impair aquatic life through changes to the physical characteristics of the stream (light reduction, temperature changes, etc.).

pH. pH is an expression of hydrogen ion concentration in water. pH affects most chemical and biological processes in water, and it is one of the most important environmental factors limiting the distribution of species in aquatic habitats. Different species flourish within different ranges of pH, with the optima for most aquatic organisms falling between pH 6.5-8. Fluctuating pH or sustained pH outside this range reduces biological diversity in streams because it physiologically stresses many species and can result in decreased reproduction, decreased growth, disease, or death.

Trash and Debris. Improperly disposed or handled trash such as paper, plastics and debris including the biodegradable organic matter such as leaves, grass cuttings, and food waste can accumulate on the ground surface where it can be entrained in urban runoff. The large amount of trash and debris can have significant negative impacts on the recreational value of water body. Excessive organic matter can create a high biochemical oxygen demand in a stream and lower its water quality.

Oxygen Demanding Substances. Oxygen-demanding substances include biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds, such as proteins, carbohydrates, fats, as well as ammonia and hydrogen sulfide. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions, resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds.

Oil and Grease. The most common sources of oil and grease in urban runoff stem from spilled fuels and lubricants, discharge of domestic and industrial wastes, atmospheric deposition, and runoff. Runoff can contain leachate from roads, breakdown of tires/rubber and deposition of automobile exhaust. Some petroleum hydrocarbons, such as polycyclic aromatic hydrocarbons (PAHs), can bioaccumulate in aquatic organisms and are toxic at low concentrations. Hydrocarbons can be measured in a variety of ways including petroleum hydrocarbons, oil and grease, or as individual groups such as PAHs. Hydrocarbons can persist in sediment for long periods of time in the environment and can result in adverse impacts on the diversity and abundance of benthic communities.

(b) Violation of Waste Discharge Requirements

Threshold	Would the project violate any water quality standards or waste discharge requirements?

Impact 4.I-6 Implementation of the proposed project would not violate any water quality standards or waste discharge requirements. This impact is considered less than significant.

The proposed Westgate Specific Plan anticipates infiltration of the entire design capture volume (DCV) based on highly permeable soil conditions. Infiltration of the entire DCV ranks as the most effective BMP strategy for pollutant removal based on the LID hierarchy for protection of water quality. It would also result in infiltration of the increased volume of stormwater between the existing and proposed 2-year storm event based on preliminary calculations, thereby satisfying HCOC requirements (i.e., post-development stormwater flow volumes entering off-site drainage facilities would not exceed pre-development volumes). Between the source control, site design features, HSC's and infiltration LID BMPs for the entire DCV for pollutant removal and runoff reduction, the proposed project is not anticipated to violate water quality standards or waste discharge requirements.

(c) Erosion and Siltation

Threshold	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or in a manner which would result in a substantial erosion or siltation on- or off-site?

Impact 4.I-7 Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or in a manner which would result in a substantial erosion or siltation on- or off-site. This impact is considered less than significant.

Under the existing conditions, runoff from the project area generally flows southwest in a sheet flow condition towards existing interim debris basins before entering into the existing regional flood control facilities (e.g., Summit Avenue Storm Drain, Highland Storm Drain, Baseline Storm Drain, etc.). Soil erosion potential is generally classified as high based on the alluvial soil type and the interim basins help reduce erosion and siltation off-site. Under the proposed conditions, runoff from the development areas will be collected into a local storm drain network and conveyed to the downstream regional flood control facilities. Drainage patterns will be largely preserved and flows will continue to drain in a southwesterly direction. The increase in impervious surfaces will serve to reduce the potential for erosion and siltation downstream and the interim debris basins will no longer be needed. In the southern portion of the site, two existing earthen channel exist today, however one no longer serves as a flood conveyance channel, and the second has been channelized downstream.

In the proposed condition, the channels will be abandoned and filled for development and the downstream improvements will be extended upstream into the project. Implementation of the project will reduce the potential for on-site erosion and siltation reaching downstream. In addition, all project runoff drains into hardened regional flood control channels or reinforced box culverts thereby eliminating the potential for downstream erosion or siltation. Potential impacts related to erosion or siltation due to hydromodification are considered less than significant.

(d) Water Quality Degradation

Threshold	Would the project otherwise substantially degrade water quality?

Impact 4.I-8 Implementation of the proposed project would not otherwise substantially degrade water quality. This impact is considered less than significant.

As discussed previously under Impact 4.I-1 above, given the proposed construction-related, site design, LID and source control BMPs and reliance on infiltration BMPs, water quality exceedances are not anticipated, and pollutants are not expected in project runoff that would adversely affect beneficial uses in downstream receiving waters. As such, impacts to water quality are considered less than significant.

(4) Consistency with Regulatory Framework

As discussed above, the proposed project would comply with all applicable federal, state, and local laws and regulations related to hydrology, drainage, flooding, and water quality. However, the City of Fontana General Plan contains various goals and policies related to drainage and water quality, including goals and policies from the Open Space & Conservation Element and the Public Facilities, Services & Infrastructure Element. As shown in **Table 4.I-7**, *General Plan Consistency Analysis*, the proposed project would be consistent with the applicable goals and policies of the Fontana General Plan, and therefore impacts in this regard would be less than significant.

Table 4.I-7

General Plan Consistency Analysis

Open Space & Conservation Element	
Goal 3.2: Protect water resources in the planning area from urban runoff and other potential pollution sources.	
Policy 3.2-1: Promote the use of structural and non-structural water quality best management practices (BMPs) in land planning and project-level site planning.	**Consistent.** The proposed project would implement all applicable BMPs for future development on-site, as required by current stormwater regulations.
Policy 3.2-2: Require structural and non-structural BMPs for all parking lots and paved storage areas within industrial and commercial zones, for the City's street network, and within the City's parks and other civic facilities.	**Consistent.** As required by the City of Fontana, future development projects on-site would incorporate all necessary structural and non-structural BMPs, as appropriate, to minimize adverse water quality effects.
Policy 3.2-3: Cooperate with ground water contamination, (e.g. perchlorates) investigations and clean up efforts by the local water agencies, the Santa Ana Regional Water Quality Control Board (SARWQCB) and responsible private parties.	**Consistent.** Although no known groundwater contamination exists within the project boundaries, future development projects would comply with all RWQCB requirements regarding groundwater quality.

Table 4.I-7 (Continued)

General Plan Consistency Analysis

Policy 3.2-4: Fulfill the City's obligations for storm water management, in accordance with the Implementation Agreement among the SBCFCD, the County, and the cities in San Bernardino County, under the terms of Order No. R8-2002-0012, issued by the SARWQCB.	**Consistent.** The proposed project would comply with all applicable stormwater management programs and related requirements.
Policy 3.2-5: Cooperate with other agencies and participate in multi-jurisdictional efforts to improve watershed management practices.	**Consistent.** The proposed project would not hinder the City's efforts to cooperate with other public agencies regarding watershed management.
Public Facilities, Services & Infrastructure Element	
Goal #8: Our City's flood control and drainage system is equitably financed and offers exceptional protection of lives and property over a full range of minor to major floods.	
Policy 8-1: Maintain the City's current Master Storm Drainage Plan as the basis for development of a flood control system to serve the community.	**Consistent.** The proposed project includes a stormwater infrastructure master plan for the project area that has been developed consistent with the City's Master Storm Drainage Plan.
Policy 8-2: Drainage planning and implementation shall be coordinated with the San Bernardino Flood Control District and adjacent cities.	**Consistent.** The proposed project's drainage master plan was designed to be consistent with the City's storm drainage plans, and therefore the proposed project would not interfere with the City's coordination of drainage planning and implementation.
Policy 8-3: Dual use concepts should be applied to flood control design as a means of enhancing open space/habitat and conserving water.	**Consistent.** The proposed project, where feasible and appropriate, could implement dual use concepts for stormwater management on-site.
Policy 8-4: Upstream runoff management and facilities should be influenced within the City's sphere of influence and beyond.	**Consistent.** The proposed project would not affect the City's or other agencies' management of upstream stormwater flows, as no physical changes to the upstream system would result from project implementation.

Source: PCR Services Corporation, 2012.

4. CUMULATIVE IMPACTS

As identified in Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR, there are four related projects within the vicinity of the proposed project, all of which are Specific Plans within the City of Fontana. These projects could potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff, resulting in cumulative impacts to hydrology and water quality. However, as with the proposed project, the related projects would be subject to State NPDES permit requirements for both construction and operation. Each individual development project greater than one-acre in size would be required to develop SWPPPs and would be evaluated individually to determine appropriate BMPs and treatment measures to avoid impacts to water quality. In addition, individual projects within the related

project Specific Plan areas will be required to submit a project-specific WQMP to ensure all requirements of the City of Fontana's Storm Water Program/LIP and ordinances on storm water quality are addressed for each project. Thus, cumulative impacts to hydrology and water quality would be less than significant and the proposed project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

The proposed project would be subject to the NPDES requirements described above, including preparation of and compliance with individual project SWPPPs and ongoing compliance with WQMP requirements for each project. Compliance with these requirements, in addition to the project design features outlined above, would ensure that impacts to hydrology and water quality are reduced to a less than significant level.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to hydrology and water quality would be less than significant.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
J. LAND USE

1. INTRODUCTION

Development on the project site is guided by policies and regulations set forth in local and regional plans and the applicable zoning. The provisions set forth in these plans have been adopted for the purpose of eliminating or reducing potential land use impacts as a result of development within their jurisdictional boundaries. This section provides an analysis of the potential impacts of the proposed project with regard to consistency with applicable land use regulations, as well as the compatibility of the proposed project with the surrounding uses in the area. Secondary environmental effects caused as a result of the land use relationships analyzed in this section are addressed in other sections of the Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Project Site Conditions

The Westgate Specific Plan project area is located on a gently sloping alluvial plain with slopes ranging from 1.5 to 2.5 percent grade. The property contains no significant topographical features, and portions of the site were previously utilized for agricultural purposes. The Falcon Ridge Town Center, with approximately 415,000 square feet of commercial retail uses, has been completed within the Specific Plan boundaries directly north of Summit Avenue. One multi-tenant office building also exists on the project site and is located along Cherry Avenue just north of SR-210. Between Baseline Avenue and the SR-210, the California Department of Transportation (Caltrans) has recently occupied a new 124,000-square-foot Transportation Management Facility and Southern Regional Lab. A Southern California Edison (SCE) Company utility corridor diagonally traverses the site in a southwesterly direction. Additionally, a Metropolitan Water District (MWD) main trunk line and right-of-way is located parallel to and along the north side of the SCE corridor, while a Southern California Gas Company (SCG) main line and right-of-way, as well as a San Gabriel Valley Municipal Water District pipeline, occur on the south side and parallel to the SCE corridor. Further, a San Bernardino Association of Governments (SANBAG) right-of-way occurs contiguous to the southwest boundary of the site. Formerly the location of a railroad line, this corridor is now part of a regional trail system with the capability for a future commuter train line. Along the southerly portion of the site just east of the I-15 freeway, a County of San Bernardino Flood Control District dual box concrete channel collects seasonal storm flows from the Etiwanda and San Sevaine Creeks to the north. An open earthen channel remains just east of the dual concrete channel that formerly collected the storm flows prior to the completion of the dual concrete channels and the Highland channel. Refer to **Figure 2-5**, *Existing Site Conditions*, in Chapter 2, *Project Description*, of this Draft EIR, for the location of the above site conditions and other site elements.

(2) Surrounding Uses

The Westgate Specific Plan project area is located in a rapidly growing area of North Fontana. The General Plan identifies areas within North Fontana as "Growth Areas.". There are over a dozen Master Planned

Developments in the nearby areas. The North Fontana area contains significant recreational uses, including Fontana Park and the Jessie Turner Health & Fitness Community Center, which includes a new community building and swim complex. A second new community center and swim complex is also located nearby at the Heritage Neighborhood Center directly south of the Westgate Specific Plan. Lighted soccer fields, baseball fields, tennis courts and other amenities area are also located directly south in the McDermott Sports Complex, adjacent to Heritage Intermediate School. **Figure 2-3**, *Existing Specific Plans and Community Plans*, in Chapter 2, *Project Description*, of this Draft EIR identifies the existing Specific Plans and Community Plans in the Westgate Specific Plan area. Adjacent and surrounding land uses around the project area are summarized as follows:

NORTH: I-15 Freeway – the 103-acre Ventana at Duncan Canyon Specific Plan is approximately ½-mile to the north. Several unimproved vacant properties are located between the Ventana project and the Westgate Specific Plan area.

EAST: Various developed residential single-family neighborhoods.

WEST: I-15 Freeway.

SOUTH: The Village of Heritage planned community is located directly to the south of the Westgate Specific Plan.

(3) Existing General Plan and Zoning Designations

The project site represents a relatively large area and therefore contains several General Plan land use designations; however, with the exception of two small areas, the entire site is zoned Specific Plan (Specific Plan #17 – Westgate), as the existing Westgate Specific Plan provides site-specific zoning for the various land uses within the Plan area. The two areas within the proposed Specific Plan boundaries that are not located within the boundaries of the adopted Westgate Specific Plan include three parcels comprising a triangular area at the northernmost end of the project area, as well as one semi-circle-shaped parcel immediately west of and adjacent to Cherry Avenue at the I-15/SR-210 interchange. The triangular area is zoned Regional Mixed Use (R-MU), Medium Density Residential (R-2), and Residential Planned Community (R-PC), while the semi-circular parcel is zoned R-MU. General Plan land use designations within the project site include the following: Regional Mixed Use (RMU), Residential Planned Community (R-PC), Medium Density Residential (R-M), General Commercial (C-G), Public Utility Corridors (P-UC), and Recreational Facilities (P-R). Existing land use designations are illustrated in **Figure 2-4**, *Existing Land Use Designations*, in Chapter 2, *Project Description*, of this Draft EIR.

b. Regulatory Framework

The following discussion identifies and generally describes the regulatory plans and policies and ordinances that would be applicable to development at the site of the proposed project. Specific provisions of those documents that pertain to the project are listed in the Impact Analysis section below and evaluated for consistency with the project features.

(1) State Level

(a) California Government Code (Section 65450 et seq.)

The State of California utilizes Section 65450 of the California Government Code to regulate the implementation of specific plans. A specific plan is a tool for the systematic implementation of a General plan. It effectively establishes a link between implementing policies of the general plan and the individual development proposals in a defined area. A specific plan may be as general as setting forth broad policy concepts, or as detailed as providing direction to every facet of development from the type, location and intensity of uses to the design and capacity of infrastructure; from the resources used to finance public improvements to the design guidelines of a subdivision.

Section 65451 of the California Government Code sets forth a range of requirements that any specific plan must address. The statutory requirements include:

a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

   1. The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
   2. The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
   3. Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
   4. A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

The adoption of a specific plan is a legislative act similar to adoption of a general plan or zoning ordinance. However, unlike a general plan, which is required to be adopted by resolution, two options are available for the adoption of a specific plan: 1) adoption by resolution, which is designed to be policy driven; or 2) adoption by ordinance, which is regulatory by design.

(2) Regional Level

(a) Southern California Association of Governments (SCAG)

SCAG is the designated regional planning agency for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. SCAG is a joint powers agency with responsibilities pertaining to regional issues. SCAG's current land use policies are set forth in the 2012 Regional Transportation Plan/Sustainable Communities Strategy, and the Compass Growth Vision, in conjunction with its constituent members and other regional planning agencies.

(i) Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The 2012-2035 RTP/SCS is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system in the SCAG region, which is composed of six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region, and includes short- and long-range population, housing, and employment projections for local, subregional, and regional geographies that are utilized for regional planning efforts.

(ii) Compass Blueprint Growth Vision

In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting as a whole, SCAG has collaborated with interdependent sub-regions, counties, cities, communities and neighborhoods in a process referred to by SCAG as Southern California Compass, which resulted in the development of a shared Growth Vision for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. SCAG began Compass Blueprint in 2002, spearheaded by the Growth Vision Subcommittee, which consists of civic leaders from throughout the region. The shared regional vision sought to address issues such as congestion and housing availability, which may threaten the region's livability.

The underlying goal of the growth visioning effort is to make the SCAG region a better place to live, work, and play for all residents. To organize the strategies for improving the quality of life in the SCAG region, four principles were established by the Growth Vision Subcommittee. These goals are contained in the Compass Blueprint Growth Vision Report. The principles are intended to promote and maximize regional mobility, livability, prosperity and sustainability. Decisions regarding growth, transportation, land use and economic development should support and be guided by these principles. Specific policy and planning strategies also are provided as a way to achieve each of the principles.

In addition, the Compass Blueprint 2% Strategy provides guidance for how and where SCAG can implement the Growth Vision goals for the region's future. The strategy calls for modest changes to current land use and transportation trends on 2% of the land area of the region. As indicated on the 2% Strategy Opportunity Areas map for San Bernardino County, the project site is not located within a Compass 2% Strategy Opportunity Area.

(b) Air Quality Management Plan

The Air Quality Management Plan (AQMP) of the South Coast Air Quality Management District (SCAQMD) presents strategies for achieving the air quality planning goals set forth in the Federal and California Clean Air Acts (CCAA), including a comprehensive list of pollution control measures aimed at reducing emissions. The SCAQMD, which was established in 1977 pursuant to the Lewis-Presley Air Quality Management Act, is responsible for bringing air quality in the South Coast Air Basin (Basin) into conformity with federal and State air pollution standards. The SCAQMD is also responsible for monitoring ambient air pollution levels throughout the Basin and for developing and implementing attainment strategies to ensure that future emissions will be within federal and State standards. The AQMP, last amended in 2007, is addressed in Section 4.B, *Air Quality*, of this Draft EIR (please refer to Section 4.B for a discussion of the project's consistency with the AQMP).

(c) Congestion Management Program

Proposition 111, passed in June 1990, provided additional transportation funding to cities and counties in California. Included with the provision for additional transportation funding was a requirement to undertake a Congestion Management Program (CMP) within each county with an urbanized area having a population of 50,000 or more, to be developed and adopted by a designated Congestion Management Agency (CMA). Within the County of San Bernardino (County), the San Bernardino Associated Governments (SANBAG) was designated the CMA by the County Board of Supervisors and a majority of the cities representing a majority of the incorporated population. The original document was adopted in November 1992. It has been updated eight times, the latest in 2007, though it is currently being updated with an anticipated release date of late 2013 (as of March 2014, however, no update has been released).

The CMP defines a network of state highways and arterials, level of service standards and related procedures, and provides technical justification for its approaches. Key intersections include all CMP intersections plus others identified by local jurisdictions as being important to maintaining mobility on the CMP system. For the CMP, intersections operating at level of service (LOS) D or lower will normally be considered key intersections, in addition to the intersections of two CMP roadways. All projects that meet the threshold for the CMP are subject to preparation of CMP Traffic Impact Analyses per CMP Guidelines. CMP Traffic Impact Analyses (TIAs) identify various local and regional circulation system improvements and impact shares as conditions for the development of the subject project. The conditions help to implement the goals and policies of the General Plan Circulation Element.

Baseline Avenue, Highland Avenue, Cherry Avenue, I-15, and SR-210, all located in or at the border of the project site, are designated CMP roadways. However, since the City of Fontana has a standard program (Circulation Development Fees) to fund regional improvements, SANBAG considers the City exempt from CMP traffic impact analysis. As such, no CMP analysis is required for the project.

(3) Local Level

(a) City of Fontana General Plan

On October 21, 2003, the City of Fontana adopted its most recent General Plan, which can be thought of as the City's constitution or long-range blueprint for its physical development. The State of California mandates that every city and county adopt a general plan. The General Plan details the community's vision by identifying goals and objectives over the next 10 to 20 years. The community's vision statement serves as a guide for the plan and its implementation. Based on the vision, proposals and initiatives can be analyzed to determine if they are in accordance with the long-range future potential of the City, and thus, beneficial to the community. Aside from the vision statement, all general plans must incorporate seven elements mandated by the State (Section 65302 of the State Government Code). The seven mandatory elements include: (1) Land Use, (2) Circulation, (3) Housing, (4)Open Space, (5) Conservation, (6) Safety, and (7) Noise. Additional elements are optional and may be included in the plan per State law. The City of Fontana has adopted the following optional elements: Community Design; Economic Development; Public Facilities; Services and Infrastructure; Parks, Recreation, and Trails; and Air Quality.

(b) City of Fontana Municipal Code

Chapter 30 of the City of Fontana Municipal Code, the *Zoning and Development Code*, serves as the City's Zoning Ordinance. The *Zoning and Development Code* includes provisions, procedures, and specific use and

design standards for each of the City's zoning districts. The *Zoning and Development Code* also provides standards designed to mitigate or avoid potential environmental impacts. *Zoning and Development Code*, Chapter 30, Article 9 establishes Overlay Districts for environmentally sensitive areas. All development projects within the City are subject to compliance with the *Zoning and Development Code*'s regulations and standards. The properties within the project site contain a variety of zoning districts. According to the City's Zoning District Map (dated July 10, 2012), the majority of the project site is composed of areas already within the existing Specific Plan boundaries, and thus are zoned Specific Plan #17 (Westgate Specific Plan). Additional zoning districts within project site boundaries include Regional Mixed-Use (R-MU), General Commercial (C-2), Medium Density Residential (R-2), and Public Utility Corridors (P-UC).

3. PROJECT IMPACTS

a. Methodology

The analysis of potential land use impacts considers consistency of the project with adopted plans and policies that regulate land use on the project site. The determination of consistency with applicable land use policies and ordinances is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions pertaining to the project site. CEQA Guidelines Section 15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision-makers should address. Evaluations are made as to whether a project is inconsistent with such plans. Projects are considered consistent with regulatory plans if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The intention of the evaluation of consistency with regulatory plans is to determine if non-compliance would result in a significant physical impact.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including land use and planning. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to land use and planning would occur if the project would result in one or more of the following:

Threshold 1: Physically divide an established community (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 2: 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 (refer to Impact Statement 4.J-1 below); or

Threshold 3: Conflict with any applicable habitat conservation plan or natural community conservation plan (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard. Also refer to Section 4.C,

Biological Resources, of this Draft EIR for a discussion of impacts and mitigation measures related to biological resources.).

c. Project Design Features

Future implementation of the proposed Specific Plan would require a number of necessary approvals, including the following:

- Adoption of the new Westgate Specific Plan;
- Amendment to the City of Fontana General Plan to reflect the new Specific Plan (including amending the General Plan Land Use Map and the Circulation Element for proposed roadway classifications);
- Amendment to the City of Fontana Zoning Ordinance;
- Certification of an Environmental Impact Report; and
- Development Agreement.

The analysis of impacts related to land use presented below is evaluated in consideration of Project Design Features. The project has been designed to minimize land use and planning impacts and associated costs through the following Project Design Features:

1. The project site is nearly contiguous to the adopted Westgate Specific Plan boundary, the land uses and intensities for which are reflected in the existing General Plan and City of Fontana Zoning and Development Code, and therefore emphasize residential, commercial, and light industrial land uses, similar to those proposed by the Specific Plan. As such, aside from an overall increase in residential densities, the types and intensities of other land uses within the Specific Plan boundaries would not be substantially different to those anticipated by the General Plan and Zoning and Development Code.

2. Where sensitive receptors (single-family residential uses, schools, etc.) are proposed or currently exist adjacent to proposed light industrial or commercial development, the proposed Specific Plan includes extensive design requirements (setbacks, building heights, floor-area ratio, screening, etc.) to minimize potential land use impacts; refer to Section 4.0, *Development Regulations*, and Section 5.0, *Community Design Guidelines*, of the proposed Specific Plan.

Additionally, as discussed in Chapter 2, *Project Description*, of this Draft EIR, the City has requested that additional residential density be incorporated into the Westgate Specific Plan to allow for potential future development of high density residential uses (R-4) as a permitted use on up to 20.0 acres within Planning Area 24 in order to assist the City in meeting its regional housing allocation requirements. This scenario assumes that up to 20.0 acres of the office/light industrial uses in Planning Area 24 are replaced with R-4 residential uses up to a density of 50 dwelling units per acre, for a total of up to 1,000 additional residential units and 10.4 acres of Mixed Use business park. This potential additional residential development, therefore, would only affect the land use pattern within the Westgate Center village of the Specific Plan, and land uses within the remainder of the Planning Areas would remain as proposed.

d. Analysis of Project Impacts

(1) Consistency with Applicable Plans and Policies

Threshold	Would the project 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?

Impact 4.J-1 *Implementation of the proposed project would not 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. This impact is considered less than significant.*

The following analysis evaluates the proposed Specific Plan's consistency with various plans, policies, and regulations applicable to the project area, including the SCAG RTP/SCS, SCAG Compass Growth Vision, SANBAG CMP, City of Fontana General Plan, and Fontana Zoning and Development Code. The proposed project's consistency with each of these plans and regulations is discussed below.

(a) SCAG Regional Transportation Plan/Sustainable Communities Strategy

Table 4.J-1, *SCAG RTP/SCS/Westgate Specific Plan Consistency*, below, evaluates the proposed project's consistency with the applicable goals and policies of the SCAG RTP/SCS. As shown in Table 4.J-1, the proposed Specific Plan would not conflict with the relevant goals and policies of the SCAG RTP/SCS and as such impacts in this regard would be less than significant.

Table 4.J-1

SCAG RTP/SCS/Westgate Specific Plan Consistency

SCAG RTP/SCS Goals	Westgate Specific Plan Consistency
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	**Not Applicable.** This goal relates to SCAG's efforts to correlate investments and policies with strategies to improve the regional economy.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** The proposed project would locate residential, commercial, light industrial, recreational, and educational uses adjacent to two major freeways and would also include extensive on-site circulation improvements, including pedestrian and bicycle infrastructure which would foster the efficient movement of people and goods throughout the project area and the region as a whole.

Table 4.J-1 (Continued)

SCAG RTP/SCS/Westgate Specific Plan Consistency

SCAG RTP/SCS Goals	Westgate Specific Plan Consistency
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent.** The proposed project would include new roadways and other traffic improvements that would be designed and constructed to meet applicable safety requirements and design standards, which would ensure that travel safety and reliability are maximized.
Goal 4: Preserve and ensure a sustainable regional transportation system.	**Consistent.** The proposed project, which entails future development projects within the Specific Plan boundaries, would be required to construct on-site traffic system improvements as well as pay applicable fair-share contributions to local and regional off-site improvements in order to mitigate project-related traffic impacts. As such, with implementation of applicable improvements, the proposed project would not hinder the preservation or sustainability of the regional transportation system.
Goal 5: Maximize the productivity of our transportation system.	**Consistent.** As noted above, the proposed project would either construct traffic improvements or pay applicable fees to help fund additional improvements, which would reduce the project's impact on, and maximize the productivity of, the region's transportation system.
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** As discussed previously, the proposed project includes an extensive network of pedestrian and bicycle-related facilities that offer a multitude of non-vehicular transportation options within the Specific Plan area.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** The proposed Specific Plan includes sustainability elements including compliance with CalGreen building standards, which are intended to achieve significant reductions in greenhouse gas emissions, energy consumption, and water use.
Goal 8: Encourage land use and growth patterns that facilitate transit and non-motorized Transportation.	**Consistent.** As discussed previously, the proposed project includes an extensive network of pedestrian and bicycle-related facilities that offer a multitude of non-vehicular transportation options within the Specific Plan area.
Goal 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Not Applicable.** This goal relates to SCAG's ongoing efforts to maintain security within the regional transportation system, which would not be affected by the proposed project.

Table 4.J-1 (Continued)

SCAG RTP/SCS/Westgate Specific Plan Consistency

SCAG RTP/SCS Goals	Westgate Specific Plan Consistency
SCAG RTP/SCS Policies	**Westgate Specific Plan Consistency**
Policy 1: Transportation investments shall be based on SCAG's adopted regional Performance Indicators.	**Not Applicable.** This policy applies to SCAG's transportation investments, which are solely the responsibility of SCAG and would not be affected by the proposed project.
Policy 2: Ensuring safety, adequate maintenance, and efficiency of operations on the existing multimodal transportation system should be the highest RTP/SCS priorities for any incremental funding in the region.	**Not Applicable.** This policy relates to SCAG's efforts to maintain safety of the regional transportation system, and provide for ongoing maintenance and efficiency of affected facilities, which would not be adversely impacted by the proposed project.
Policy 3: RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.	**Consistent.** The proposed project would not affect, or be affected by, SCAG RTP/SCS land use and growth strategies. Further, the proposed project has been put forth by the City of Fontana, which inherently considers local input on project-related growth, and would not adversely affect smart growth initiatives.
Policy 4: Transportation demand management (TDM) and non-motorized transportation will be focus areas, subject to Policy 1.	**Consistent.** The proposed Specific Plan includes a variety of uses intermixed within the Plan area, which is intended to foster vehicle trip reduction for on-site uses. Further, as noted above, the proposed Specific Plan includes an extensive network of pedestrian and bicycle-related facilities that offer a multitude of non-motorized transportation options within the Specific Plan area.
Policy 5: HOV gap closures that significantly increase transit and rideshare usage will be supported and encouraged, subject to Policy 1.	**Not Applicable.** HOV closures are solely the responsibility of one or more public transportation agencies, including the California Department of Transportation (Caltrans), and therefore such closures would not be affected by the proposed project.
Policy 6: Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.	**Not Applicable.** Monitoring progress and implementation aspect of the RTP/SCS is solely the responsibility of SCAG, and therefore this policy is not applicable to the proposed project.

Source: PCR Services Corporation, 2014

(b) SCAG Compass Growth Vision

Table 4.J-2, *SCAG Compass Blueprint/Westgate Specific Plan Consistency*, below, evaluates the proposed project's consistency with the applicable principles and related policies of the SCAG Compass Blueprint. As shown in Table 4.J-2, the proposed Specific Plan would not conflict with the relevant principles and policies of the SCAG Compass Blueprint and as such impacts in this regard would be less than significant.

Table 4.J-2

SCAG Compass Blueprint/Westgate Specific Plan Consistency

SCAG Compass Blueprint Growth Visioning Principles	Westgate Specific Plan Consistency
Principle #1: Improve mobility for all residents.	
▪ Encourage transportation investments and land use decisions that are mutually supportive.	**Consistent.** The proposed Specific Plan would include numerous traffic improvements to support future development associated with the project. Moreover, development associated with the project would be consistent with the goals and policies of the City's General Plan. Thus, the project would be consistent with this policy.
▪ Locate new housing near existing jobs and new jobs near existing housing.	**Consistent.** The proposed Specific Plan includes a variety of uses including residential communities, commercial districts, business parks, and schools intermixed within the Plan area, which is intended to foster vehicle trip reduction for on-site uses.
▪ Encourage transit-oriented development.	**Consistent.** While the proposed Specific Plan does not include a traditional transit-oriented development (TOD) component given the lack of regional rail or other transit hub on-site, the proposed project does include opportunities for increased public transit ridership through provision of new transit stops or other related facilities.
▪ Promote a variety of travel choices.	**Consistent.** The proposed project includes an extensive network of pedestrian and bicycle-related facilities that offer a multitude of non-vehicular transportation options within the Specific Plan area. Additionally, the proposed project would provide opportunities for increased public transit ridership through provision of new transit stops or other related facilities.
Principle #2: Foster livability in all communities.	
▪ Promote infill development and redevelopment to revitalize existing communities.	**Consistent.** While the proposed project includes very limited potential for redevelopment (existing multi-tenant office building along Cherry Avenue), the project area is generally surrounded by existing residential, commercial, and transportation-related development. As such, the proposed Specific Plan would promote infill development within the project area by allowing for the efficient future development of remaining vacant properties surrounded by other development in the northern portion of the City of Fontana.
▪ Promote developments that provide a mix of uses.	**Consistent.** The proposed Specific Plan includes a variety of uses including residential communities, commercial districts, business parks, and schools intermixed within the Plan area.

Table 4.J-2 (Continued)

SCAG RTP/SCS/Westgate Specific Plan Consistency

SCAG Compass Blueprint Growth Visioning Principles	Westgate Specific Plan Consistency
▪ Promote "people-scaled," pedestrian-friendly communities.	**Consistent.** The proposed project includes an extensive network of pedestrian and bicycle-related facilities that offer a multitude of non-vehicular transportation options within the Specific Plan area. In particular, the proposed Specific Plan includes trails to interconnect a variety of uses on- and off-site, as well as a pedestrian bridge.
▪ Support the preservation of stable, single-family neighborhoods.	**Consistent.** The proposed project would allow for the development of a variety of land uses on-site, including single-family residential communities, and would not adversely affect existing off-site single-family neighborhoods in the project area.
Principle #3: Enable prosperity for all people.	
▪ Provide a variety of housing types in each community to meet the housing needs of all income levels.	**Consistent.** The proposed Specific Plan includes a wide range of housing options on the project site that meet the housing needs of various income levels.
▪ Support educational opportunities that promote balanced growth.	**Consistent.** The proposed Specific Plan includes three school campuses incorporated into the overall development plan, which is intended to meet the educational needs of future on-site neighborhoods and existing off-site neighborhoods alike.
▪ Ensure environmental justice regardless of race, ethnicity or income class.	**Consistent.** The proposed Specific Plan would be implemented as market conditions allow, and would not result in increased environmental risks or burdens for any particular race, ethnicity, or income class.
▪ Support local and state fiscal policies that encourage balanced growth.	**Consistent.** The City of Fontana is utilizing the proposed Specific Plan as a vehicle to achieve balanced, orderly, and efficient growth within the project area.
▪ Encourage civic engagement.	**Consistent.** The proposed Specific Plan has been developed with input from the City of Fontana and community at-large, which has served to foster civic engagement relative to future development on-site.
Principle #4: Promote sustainability for future generations.	
▪ Preserve rural, agricultural, recreational and environmentally sensitive areas.	**Partially Consistent.** While the majority of the project site was historically used for vineyards or other agricultural activities, the City has long since designated the project site for urban uses and active agriculture on the project site no longer occurs. Although agricultural activities no longer occur on-site, the permanent conversion of agricultural land designated as Unique Farmland on a substantial portion of the project site is considered a significant unavoidable impact under CEQA (refer to Section 4.B, *Agriculture and Forestry Resources*,

Table 4.J-2 (Continued)

SCAG Compass Blueprint/Westgate Specific Plan Consistency

SCAG Compass Blueprint Growth Visioning Principles	Westgate Specific Plan Consistency
	of this Draft EIR for further discussion of impacts to agricultural resources). Recreational opportunities on-site do not currently exist, but would be provided as part of the proposed Specific Plan. Environmentally sensitive areas on-site would be preserved through implementation of mitigation measures as deemed appropriate by affected resource agencies during future permitting efforts.
▪ Focus development in urban centers and existing cities.	**Consistent.** As noted above, the project site is surrounded by urban development and freeway corridors within the corporate boundaries of the City of Fontana.
▪ Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste.	**Consistent.** The proposed Specific Plan includes a number of sustainability features intended to reduce water and energy consumption and reduce sources and rates of pollution.
▪ Utilize "green" development techniques.	**Consistent.** The proposed Specific Plan includes sustainability elements including compliance with CalGreen building standards, which are intended to achieve significant reductions in greenhouse gas emissions, energy consumption, and water use.

Source: PCR Services Corporation, 2014

(c) SANBAG Congestion Management Program

As noted above, the San Bernardino County CMP defines a network of state highways and arterials, level of service standards and related procedures, and provides technical justification for its approaches. Key intersections include all CMP intersections plus others identified by local jurisdictions as being important to maintaining mobility on the CMP system. For the CMP, intersections operating at level of service (LOS) D or lower will normally be considered key intersections, in addition to the intersections of two CMP roadways. All projects that meet the threshold for the CMP are subject to preparation of CMP Traffic Impact Analyses per CMP Guidelines. However, since the City of Fontana has a standard program (Circulation Development Fees) to fund regional improvements, SANBAG considers the City exempt from CMP traffic impact analysis. As such, no CMP analysis is required for the project. Additionally, because mitigation measures would be implemented for future development that would reduce project-related impacts to traffic facilities (including identified CMP facilities) to less than significant, the proposed project would not conflict with the CMP and land use impacts in this regard would be less than significant (refer to Section 4.L, *Transportation/Traffic*, of this Draft EIR for a discussion of impacts and mitigation measures related to traffic). It should be noted that the potential additional traffic generation associated with development of R-4 high density residential uses

within Planning Area 24 could trigger significant traffic system impacts at various intersections in the project area, as further discussed in Section 4.L, *Transportation/Traffic*, of this Draft EIR, and thus intersection impacts under this development scenario are conservatively concluded to be significant and unavoidable. However, despite the potential for significant intersection traffic impacts, this does not necessarily translate to a significant land use impact with regard to consistency with the SANBAG CMP. This is due to the fact that, as discussed above, mitigation measures would still be implemented as needed to address intersection impacts and the City of Fontana has a standard program (Circulation Development Fees) to fund regional improvements, and as such SANBAG considers the City exempt from CMP traffic impact analysis. Therefore, given implementation of applicable traffic mitigation measures and participation in the City's Circulation Development Fee program, implementation of the additional residential development in Planning Area 24 would not result in conflicts with the SANBAG CMP and impacts in this regard would be less than significant.

(d) Fontana General Plan

Table 4.J-3, *Fontana General Plan Land Use Element/Westgate Specific Plan Consistency*, below, evaluates the proposed project's consistency with the applicable goals and policies of the Fontana General Plan Land Use Element. As shown in Table 4.J-3, the proposed Specific Plan would not conflict with the relevant goals and policies of the General Plan Land Use Element. Therefore, land use impacts related to consistency with the City's General Plan would be considered less than significant.

Table 4.J-3

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Land Use Element	
Goal #1: Land Use in our community is balanced between residential, commercial, industrial, open space and recreational land uses that are developed to high standards of quality and provide diverse economic, social, and cultural opportunities for our citizens and those who wish to invest here.	
Policy 1-1: Development shall be consistent with our land use plan and contribute to the maintenance of an economic base that provides high quality jobs for those who choose to both live and work in Fontana.	**Consistent.** The proposed Specific Plan includes a range of land uses similar to those designated for the project site by the adopted Westgate Specific Plan. While residential densities would generally be increased under the proposed project relative to the adopted Specific Plan, the land use plan itself would be consistent with the types of uses already planned to be developed within the project site. Furthermore, the proposed Specific Plan would provide a variety of retail, office, and light industrial employment opportunities within the project area, which would contribute to the maintenance of the City's economic base.
Policy 1-2: A variety of residential uses, product types, and densities shall be developed in Fontana to meet the housing needs of people with varied incomes and lifestyle choices.	**Consistent.** The proposed Specific Plan includes a wide range of housing options on the project site that meet the housing needs of people with various income levels and lifestyles.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Policy 1-3: New planned communities in our City shall be developed to high standards for site design and landscaping and shall incorporate and/or be linked with amenities such as community facilities, schools, parks and other forms of open space.	**Consistent.** The proposed Specific Plan includes development standards and design guidelines that would be subject to review and approval by the City of Fontana, and would serve to ensure that future development incorporates high quality designs and landscaping. Further, the proposed project includes residential, commercial, and light industrial uses intermixed with a variety of amenities such as schools, parks, open space, and pedestrian and bicycle facilities.
Policy 1-4: Activity centers identified conceptually on the Land Use Plan shall be the preferred form of development for residentially serving retail, services and entertainment uses, and shall incorporate open spaces for public gathering as well.	**Consistent.** The proposed project provides for a multitude of activity centers throughout the Plan area, including parks/community facilities, schools, business parks, and retail centers, all of which would provide common areas or open spaces for public gathering.
Policy 1-5: Areas designated as Regional Mixed Use on the Land Use Plan shall be developed with a mix of non-residential and residential uses responsive primarily to regional market and locational forces.	**Consistent.** The portions of the project site currently designated as Regional Mixed Use would be incorporated into the proposed Specific Plan would be designated for Mixed Use and residential uses. Areas of the Specific Plan designated at Mixed Use can include a mix of retail, office, and light industrial uses, to be determined by market forces. In addition, Planning Area 24 (MU-1) would allow R-4 high density residential uses as a permitted use on up to 20.0 acres, which would allow for development of up to 1,000 additional residential units within this planning area.
Goal #2: Quality of life in our community is supported by development that avoids negative impacts on residents and businesses and is compatible with, and enhances, our natural and built environment.	
Policy 2-1: New development with potentially adverse impacts on existing neighborhoods or residents such as noise, traffic, emissions and storm water runoff, shall be located and designed so that quality of life and safety in existing neighborhoods are preserved.	**Consistent.** The proposed Specific Plan would allow for the development of new urban uses adjacent or proximate to existing residential neighborhoods. However, implementation of development regulations and infrastructure improvements included in the Specific Plan, as well as project-specific mitigation measures (as applicable), would preclude the potential for substantial adverse effects on these existing neighborhoods.
Policy 2-2: Regionally beneficial land uses such as transportation corridors, flood control systems, utility corridors, and recreational corridors shall be sensitively integrated into our community.	**Consistent.** The project site contains major freeway corridors, flood control channels, and a utility corridor, which have been integrated into the overall project design in such a manner as to minimize adverse effects on or from these features in association with the proposed project.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Policy 2-3: Infill development within existing residential neighborhoods shall be compatible with adjacent uses and enhance the local character.	**Consistent.** Some portions of the Specific Plan area are located adjacent to existing residential development, and future development in these areas would be consistent with the nature, intensity, and design of existing neighborhoods.
Policy 2-4: Hillside development and development adjacent to natural areas at northern and southern edges of the City shall be designed to preserve natural features and habitat.	**Consistent.** While the project area is not located within any hillside areas and the project site is generally disturbed from past agricultural activities, the portions of the project site characterized by sensitive habitats would be subject to mitigation measures that minimize adverse effects on significant resources.
Policy 2-5: Multiple uses within utility easements shall emphasize open spaces but may accommodate more intensive uses to safely augment adjacent uses.	**Consistent.** The proposed project design incorporates passive trail and open space uses within the on-site utility easement, subject to review and approval by applicable utility companies and/or public agencies.
Goal #3: Our community is developing in a unified, orderly, logical, environmentally sound manner, which ensures that the City is unified and accessible to all residents, and results in economically sound commercial areas, vibrant neighborhoods, and jobs rich centers.	
Policy 3-1: Areas adjacent to freeway and major arterial corridors shall be given special land use and development standards guidance.	**Consistent.** The proposed Planning Areas located adjacent to the I-15 and SR-210 corridors include almost exclusively Mixed Use designations, which are generally more compatible with freeway-related conditions such as air quality and noise effects. However, where more sensitive uses such as residential neighborhoods are located near the freeway corridors (including potential high density residential uses within Planning Area 24), specific setback, building orientation, landscaping, and/or screening requirements would be incorporated into project design to minimize adverse effects on these uses associated with proximity to the freeway.
Policy 3-2: Land uses within freeway and arterial corridors shall be arranged around focal points of varied sizes and configurations to convey a sense of distinctiveness.	**Consistent.** To the extent required by the City of Fontana, future on-site development near or adjacent to freeway corridors would be arranged around focal points of varied sizes and configurations to convey a sense of distinctiveness.
Policy 3-3: Circulation system improvements shall continue to be pursued that facilitate connectivity across freeway and rail corridors.	**Consistent.** Future traffic system improvements would be required to be implemented, as necessary, as development occurs on-site, which would facilitate connectivity across the I-15 and SR-210 freeway corridors.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Policy 3-4: Improvements shall be made to transportation corridors that promote physical connectivity and reflect consistently high aesthetic values.	**Consistent.** The proposed circulation system includes a network of roadways, trails, and other non-vehicular transportation facilities that would provide physical connectivity throughout the Specific Plan area and surrounding community. Further, the Specific Plan streetscape designs for on-site roadways would provide a consistently high aesthetic value along these corridors.
Policy 3-5: Activity centers should be linked with residential neighborhoods and be accessible by multiple modes of transportation.	**Consistent.** The proposed Specific Plan includes a network of roadways, trails, sidewalks, paseos, and other non-vehicular transportation facilities that would allow access for multiple modes of transportation throughout the project area.
Policy 3-6: Annexations shall be pursued that promote Community balance, quality development, and improvement of the City's economic base as follows: a. Annexations may be initiated by the City Council (adopted resolution) or by property owners or registered voters (written petition). b. Annexations should be initiated for unincorporated land that is contiguous to the City's corporate boundaries that are desirous of City services, such as, police, street sweeping, graffiti removal, tree trimming, street improvements and maintenance, sewer availability, and other services provided by the City. c. A Plan for Services shall be prepared for all annexations and submitted to the City Council for review and consideration. d. A fiscal impact analysis shall be conducted for all annexation areas. e. Pre-zoning of a proposed annexation area shall be completed prior to submission of an annexation application to the Local Agency Formation Commission of San Bernardino County. f. Irrevocable Agreements to Annex shall be utilized when sewer service is extended outside the City's corporate limits to an existing residence or an existing commercial or industrial establishment. g. Irrevocable Agreements to Annex shall be utilized when sewer service is necessary for new developments that are not contiguous to the City's corporate boundaries; otherwise, annexation to the City is strongly urged. h. Pre-annexation agreements may be utilized for proposed developments or existing developments that are not contiguous to the City's corporate boundaries. Pre-annexation agreements may be used to outline land use	**Not Applicable.** The proposed project is located entirely within the corporate boundary of the City of Fontana, and therefore no annexations are proposed as part of the project.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

designations, development standards, conditional use permits approved by the County of San Bernardino, donation of right-of-way easements, sewer service, and other requirements, as necessary.	
Goal #4: The quality of life and economic vitality in our City's core areas are enhanced by strategic infill of new development and revitalization of existing development.	
Policy 4-1: Infill development shall be accorded a high priority in the commitment of City resources and available funding.	**Not Applicable.** While the development of the largely undeveloped project site with urban uses in the context of existing development within north Fontana may be considered infill development, the City's prioritization of such development for funding is solely the responsibility of the City and would not be affected by the proposed Specific Plan.
Policy 4-2: Special incentives shall continue to be applied to revitalization of deteriorated housing stock, residential neighborhoods, major business corridors and employment centers.	**Not Applicable.** This policy relates to the City's incentives for revitalization of existing developments and therefore is not applicable to the proposed Specific Plan.
Policy 4-3: Where necessary to stimulate the desired mix and intensity of development, land use flexibility and customized site development standards shall be achieved through various master planning devices such as specific plans, planned development zoning and creative site planning on individual building sites.	**Consistent.** The proposed Specific Plan provides for flexibility and project-specific development standards and design guidelines that would be applied to all future development on-site.
Policy 4-4: Clustering of development at key points with intermediate sectors of less intensive uses should be promoted along arterial corridors.	**Consistent.** The proposed Specific Plan provides a variety of land use types and intensities along on-site arterial corridors in order to diversify the development pattern along these roadways.
Policy 4-5: Assembly of parcels to allow for more efficient development patterns should be promoted wherever adjacent neighborhoods are not adversely impacted.	**Consistent.** The Specific Plan area includes 964 acres of land with multiple landowners; however, wherever deemed beneficial, parcels would be assembled to allow for development efficiency.
Policy 4-6: Code enforcement shall be used in coordination with all relevant City departments to reverse deterioration and achieve acceptable levels of development quality.	**Consistent.** Future development on-site would be subject to ongoing inspection by City staff to ensure that development quality is maintained through the life of the proposed project.
Policy 4-7: Aggressive collaboration with the County of San Bernardino shall be sustained to achieve acceptable development quality within Fontana's sphere of influence.	**Not Applicable.** No portion of the project area is located outside the City's corporate boundary; as such, no collaboration with the County with regard to the proposed Specific Plan is required.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Policy 4-8: Maintaining ongoing relationships with businesses, property owners and residents in designated infill areas shall be a priority for City staff.	**Consistent.** To the extent warranted, future businesses, property owners, and residents within on-site development projects would maintain relationships with the City and its staff.
Goal #5: Our Downtown is a vibrant, pedestrian-friendly, economically healthy, safe, convenient and accessible district that serves as the true heart and focal point of the community.	
Policy 5-1: Downtown should be revitalized and redeveloped with a mix of uses attractive to broad segments of Fontana's population that stimulates activity during day and evening hours, and on the weekend.	**Not Applicable.** This policy applies to development within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.
Policy 5-2: New projects implemented in Downtown shall be designed and scaled to attract pedestrians and promote interest and life on the street.	**Not Applicable.** This policy applies to development within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.
Policy 5-3: The physical connections among public and civic uses in and around the Downtown, and between Downtown and the surrounding neighborhoods, shall be expanded and improved with custom design standards found only in the downtown area.	**Not Applicable.** This policy applies to development within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.
Policy 5-4: Downtown, its Metrolink Station and Transit Plaza, and the surrounding community shall be accessible and connected by multiple modes of transportation including pedestrian, bicycle, transit and automobile.	**Not Applicable.** This policy applies to development within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.
Policy 5-5: The residential neighborhoods that are connected to the Downtown shall be preserved and enhanced.	**Not Applicable.** This policy applies to development within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.
Policy 5-6: Special events and community celebrations should be focused, at least partially, on the downtown area to stimulate its role as a community focal point.	**Not Applicable.** This policy applies to events and activities within the City's Downtown. Because the project site is located several miles away from the City's Downtown, this policy is not applicable to the proposed Specific Plan.

Table 4.J-3 (Continued)

Fontana General Plan Land Use Element/Westgate Specific Plan Consistency

Goal #6: Develop our community in a safe, defensible, unified, orderly and, environmentally sound manner, in order to facilitate a reduction in crime, resulting in a safer community.	
Policy 6-1: Residential, Commercial and Industrial development shall be designed in accordance with safe standards and CPTED principles.	**Consistent.** To the extent required by the City or other affected public agencies, all future on-site development would be designed in accordance with safe standards and CPTED principles.
Policy 6-2: All development within the City shall be evaluated for safety and maintenance.	**Consistent.** To the extent required by the City or other affected public agencies, all future on-site development would be evaluated for safety and maintenance.

Source: PCR Services Corporation, 2014

(e) Fontana Zoning and Development Code

The City of Fontana *Zoning and Development Code*, is included as Chapter 30 of the FMC, and regulates land uses and development standards within the City, including the City's noise standards. As stated above, the majority of the project site is composed of areas already within the existing Specific Plan, and thus are zoned Specific Plan #17 (Westgate). Additional zoning districts within project site boundaries include Regional Mixed-Use (R-MU), General Commercial (C-2), Medium Density Residential (R-2), and Public Utility Corridors (P-UC).

The Article II, Division 9 of the City's *Zoning and Development Code* establishes the purpose for the Specific Plan zoning. Based on the *Zoning and Development Code*, the goals of a specific plan are to:

1. To promote and protect the public health, safety, and welfare.
2. To implement the goals and objectives of the General Plan.
3. To enhance the quality of development.
4. To obtain the quality of life resulting from comprehensive and orderly planning.
5. To encourage greater flexibility and more creative and imaginative designs for large scale projects.
6. To promote efficient use of land while providing a variety of housing choices and commercial and industrial activities, a high level of amenities, and preservation of natural and scenic open space.
7. To promote a process for review and regulation of large scale comprehensively planned urban communities.

The proposed Westgate Specific Plan would be consistent with the intentions of a Specific Plan under the City's *Zoning and Development Code*.

Section 4.0, *Development Regulations*, and Section 5.0, *Community Design Guidelines*, of the proposed Specific Plan contain the development specifications, regulations and design guidelines for all development projects within the project site. Development of the project area would occur in accordance with the permitted uses and development standards established by the Specific Plan.

The proposed Specific Plan proposes a total of 16 land use districts; refer to Chapter 2.0, *Project Description*, of this Draft EIR. Each land use district reflects its own range of allowable uses and permit requirements, in addition to development standards that regulate floor-area ratio (FAR), lot dimensions, and the size/height of proposed structures. All development within the project site, would be required to comply with the development standards established by the proposed Specific Plan.

Overall, future development associated with the project would be subject to review through the development application process and would be analyzed by the City to ensure that the development is consistent with the development regulations and requirements. It should be noted that where the proposed Specific Plan is silent on a development standard or design requirement, the City's Municipal Code applies. Although a zone change would be required as part of the project, compliance with the development standards of the proposed Specific Plan, once it has been adopted, would ensure that development of the proposed project would not conflict with the standards and regulations of the City's *Zoning and Development Code*. Therefore, with approval of the proposed Specific Plan, the proposed project would be considered consistent with the *Zoning and Development Code*, and impacts would be less than significant.

4. CUMULATIVE IMPACTS

Development of the proposed project is not anticipated to result in cumulative significant land use impacts relative to compliance with the applicable principles, goals, objectives, and/or policies of the SCAG *RTP/SCS*, SCAG *Compass Blueprint*, SANBAG CMP, or the City of Fontana *General Plan* and *Zoning and Development Code*. Any future development occurring as part of the proposed project in addition to identified cumulative development must undergo a project review process in order to preclude potential planning policy conflicts. Each project would be analyzed independent of other land uses, as well as within the context of existing and planned developments to ensure that the goals, objectives and policies of the General Plan and all other applicable policies and development guidelines are consistently upheld. Thus, the proposed project along with identified cumulative projects would not result in cumulatively considerable land use impacts, and the project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

The proposed project would not result in any potentially significant impacts with regard to land use consistency, and therefore no mitigation measures are required.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project would be consistent with the existing regulatory framework relative to land use, including SCAG plans and programs, SANBAG CMP, and the City's General Plan and Zoning and Development Code. Impacts would be less than significant in this regard.

4. ENVIRONMENTAL IMPACT ANALYSIS
K. NOISE

1. INTRODUCTION

This section analyzes potential noise and vibration impacts associated with construction and operation of the proposed project. The analysis describes the existing noise environment within the vicinity of the project site, estimates future noise levels at surrounding land uses resulting from construction and operation of the proposed project, identifies the potential for significant impacts, and provides mitigation measures to address significant impacts. In addition, an evaluation of the potential cumulative noise impacts from the proposed project and known related projects is also provided. Noise calculation worksheets are included in Appendix I of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Noise and Vibration Basics

(1) Noise

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility of sound is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which gives the level of sound in decibels (dB). The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human, frequency-dependent response, the A-weighted filter system is used to adjust measured sound levels. The A-weighted sound level is expressed in "dBA." This scale de-emphasizes low frequencies to which human hearing is less sensitive and focuses on mid- to high-range frequencies.

Although the A-weighted scale accounts for the range of people's response, and therefore, is commonly used to quantify individual event or general community sound levels, the degree of annoyance or other response effects also depends on several other perceptibility factors. These factors include:

- *Ambient (background) sound level;*
- *Magnitude of sound event with respect to the background noise level;*
- *Duration of the sound event;*
- *Number of event occurrences and their repetitiveness; and*
- *Time of day that the event occurs.*

People judge the relative magnitude of sound sensation by subjective terms such as "loudness" or "noisiness." That is, a change in sound level of 3 dB is considered "just perceptible," a change in sound level of 5 dB is considered "clearly noticeable, and a change in 10 dB is recognized as "twice as loud".[1]

In an outdoor environment, sound levels attenuate through the air as a function of distance. Such attenuation is called "distance loss" or "geometric spreading" and is based on the source configuration, point source, or line source. For a point source, the rate of sound attenuation is 6 dB per doubling of distance from the noise source. For example, a sound level of 50 dBA at a distance of 25 feet from the noise source would attenuate to 44 dBA at a distance of 50 feet. For a line source, such as a constant flow of traffic on a roadway, the rate of sound attenuation is 3 dB per doubling of distance.[2] In addition, structures (e.g., buildings and solid walls) and natural topography (e.g., hills) that obstruct the line-of-sight between a noise source and a receptor further reduce the noise level if the receptor is located within the "shadow" of the obstruction, such as behind a sound wall. This type of sound attenuation is known as "barrier insertion loss." If a receptor is located behind the wall but still has a view of the source (i.e., line-of-sight not fully blocked), some barrier insertion loss would still occur, however to a lesser extent. Additionally, a receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding the noise. Noise barriers can provide noise level reductions ranging from approximately 5 dBA (where the barrier just breaks the line-of-sight between the source and receiver) to an upper range of 20 dBA with a more substantial barrier.[3]

Community noise levels usually change continuously during the day. The equivalent sound level (L_{eq}) is normally used to describe community noise. The L_{eq} is the equivalent steady-state A-weighted sound level that would contain the same acoustical energy as the time-varying A-weighted sound level during the same time interval. For intermittent noise sources, the maximum noise level (L_{max}) is normally used to represent the maximum noise level measured during the measurement. Maximum and minimum noise levels, as compared to the L_{eq}, are a function of the characteristics of the noise source. As an example, sources such as generators have maximum and minimum noise levels that are similar to L_{eq} since noise levels for steady-state noise sources do not substantially fluctuate. However, as another example, vehicular noise levels along local roadways result in substantially different minimum and maximum noise levels when compared to the L_{eq} since noise levels fluctuate during pass-by events. The City of Fontana Noise Element uses the L_{eq} to evaluate noise violations.

To assess noise levels over a given 24-hour time period, the community noise equivalent level (CNEL) descriptor is used in land use planning. CNEL is the time average of all A-weighted sound levels for a 24-hour period with a 5 dBA adjustment (upward) added to the sound levels which occur in the evening (7:00 P.M. to 10:00 P.M.) and a 10 dBA adjustment (upward) added to the sound levels which occur in the night (10:00 P.M. to 7:00 A.M.). These penalties attempt to account for increased human sensitivity to noise during the quieter nighttime periods, particularly where sleep is the most probable activity. CNEL has been adopted by the State of California to define the community noise environment for development of a community noise

1 *Engineering Noise Control, Bies & Hansen, 1988.*

2 *Caltrans, Technical Noise Supplement (TeNS), 2009.*

3 *Ibid.*

element of a General Plan and is also used by City of Fontana for land use planning in the City's Noise Element of the General Plan.[4]

(2) Ground-Borne Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. With respect to ground-borne vibration, velocity and acceleration descriptors are typically used, as most vibration sensors are velocity or acceleration sensor. In addition, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration.[5] Vibration amplitudes are usually described as either peak, as in peak particle velocity (PPV) or root-mean-square (RMS). The RMS vibration velocity level can be presented in inches/second or in VdB (referenced to 1 micro-inches per second). The peak level represents the maximum instantaneous peak of the vibration signal and the RMS represents the average of the squared amplitude of the vibration signal. In addition, vibrations can be measured in the vertical, horizontal longitudinal, or horizontal transverse directions. Ground vibrations are most often greatest in the vertical direction.[6] Therefore, the analysis of ground-borne vibration is addressed in the vertical direction.

b. Regulatory Framework

Many government agencies have established noise standards and guidelines to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise. The project site is located in the City of Fontana. Therefore, applicable policies and regulations from the City of Fontana are used to assess potential noise impacts from the proposed project.

(1) City of Fontana General Plan Noise Element

The overall purpose of the Noise Element of a General Plan is to protect citizens from the harmful and annoying effects of exposure to excessive noise. The Noise Element (Chapter 12) provides a systematic approach to identifying and appraising noise problems in the community, quantifying existing and projected noise levels, addressing excessive noise exposure, and community planning for the regulation of noise. The element includes policies, standards, criteria, programs, diagrams, a reference to action items, and maps related to protecting public health and welfare from noise.

Table 4.K-1, *Noise and Land Use Compatibility Matrix*, illustrates the guidelines established in Noise Element and based on standards for acceptable noise levels from the California Office of Noise Control. The City's General Plan Environmental Impact Report (General Plan EIR) incorporates the same noise and land use compatibility criteria recommended by the State of California Department of Health and the OPR Guidelines. These standards and criteria are incorporated into the land use planning process to reduce future noise and land use incompatibilities. This table is the primary tool that allows the City to ensure integrated planning for compatibility between land uses and outdoor noise. CNEL guidelines for specific land uses are classified into four categories: (1) "normally acceptable," (2) "conditionally acceptable," (3) "normally unacceptable," and (4) "clearly unacceptable." As shown in, a CNEL value of 65 dBA is the upper limit of what is considered

[4] *State of California, General Plan Guidelines, 2002.*

[5] *Federal Transit Authority, Transit Noise and Vibration Impact Assessment, Final Report, page 7-3, April 1995.*

[6] *California Department of Transportation (Caltrans), Transportation Related Earthborne Vibrations, page 4, February 2002.*

Table 4.K-1

Noise and Land Use Compatibility Matrix

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable [a]	Conditionally Acceptable [b]	Normally Unacceptable [c]	Clearly Unacceptable [d]
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 to 60	55 to 70	70 to 75	75 to 85
Residential - Multi-Family Homes	50 to 65	60 to 70	70 to 75	70 to 85
Transient Lodging—Motels, Hotels	50 to 65	60 to 70	70 to 80	80 to 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 to 70	60 to 70	70 to 80	80 to 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 to 70	NA	65 to 85
Sports Arena, Outdoor Spectator Sports	NA	50 to 75	NA	70 to 85
Playgrounds, Neighborhood Parks	50 to 70	NA	67.5 to 75	72.5 to 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 to 75	NA	70 to 80	80 to 85
Office Buildings, Business and Professional Commercial	50 to 70	67.5 to 77.5	75 to 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 to 75	70 to 80	75 to 85	NA

[a] *Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.*

[b] *Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning would normally suffice.*

[c] *Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.*

[d] *Clearly Unacceptable: New construction or development should generally not be undertaken.*

NA: Not App0licable

Source: City of Fontana, General Plan Update Environmental Impact Report, August 6, 2003

a "normally acceptable" noise environment for multi-family residential uses, although a CNEL as high as 70 dBA is considered "conditionally acceptable."

As shown in, a CNEL value of 65 dBA is the upper limit of what is considered a "normally acceptable" noise environment for multi-family residential uses, although a CNEL as high as 70 dBA is considered "conditionally acceptable." New development should generally be discouraged within the "unacceptable" category. However, if new development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

(2) City of Fontana Municipal Code

The City of Fontana Noise Standards are provided in Chapter 30 of the City of Fontana Municipal Code (FMC). These standards pertain to stationary noise sources. As shown in **Table 4.K-2**, Interior/Exterior Noise Level Standards, the exterior levels within any Zoning District should not exceed 65 dBA at any time of the day.

Table 4.K-2

Noise Standards

	Maximum Allowable, Any Time of Day	
Land Use	**Interior**	**Exterior**
All Zoning Districts	45 dBA	65 dBA

Source: City of Fontana Municipal Code, Table 30-182.A, Section 30-182

In addition, FMC Section 18-63(7) allows construction noise in excess of normally defined thresholds between the hours of 7:00 A.M. and 6:00 P.M. on weekdays and between the hours of 8:00 A.M. and 5:00 P.M. on Saturdays.

(3) Ground-Borne Vibration

The City of Fontana does not have specific policies or guidelines relative to ground-borne vibration. As such, policies and guidelines from Caltrans and Federal Transit Administration (FTA) are utilized to assess impacts due to ground-borne vibration. Ground-borne vibration impacts are evaluated based on a) potential building damage, b) potential human annoyance, and c) potential effect on vibration sensitive equipment. The FTA and Caltrans have adopted guidelines/recommendations to limit ground-borne vibration based on the age and/or condition of the structures that are located in close proximity to construction activity. Studies by the Caltrans and FTA show vibration velocity levels greater than 0.04 inch per second PPV are distinctly perceptible to human and become strongly perceptible when reaching 0.10 inch per second PPV as shown in **Table 4.K-3**, *Guideline Vibration Annoyance Potential Threshold Criteria*.

The building damage threshold with respect to ground vibration varies depending on the age and condition of the structure in question. While modern industrial/commercial buildings can endure vibration levels up to a maximum of 0.5 inch per second PPV, older structures have a much lower vibration tolerance of 0.3 inch per second PPV. Furthermore, buildings of historical nature or extremely fragile structures have an even lower vibration damage threshold of 0.08 to 0.25 inch per second PPV as shown in **Table 4.K-4**, *Guideline Vibration Damage Potential Threshold Criteria*.

c. Existing Conditions

(1) Sensitive Receptors and Locations

Some land uses are considered more sensitive to intrusive noise than others due to the types of activities and characteristics associated with particular land uses. Specifically, residences, schools, libraries, religious institutions, hospitals and nursing homes are generally more sensitive to noise than are commercial and

Table 4.K-3

Guideline Vibration Annoyance Potential Threshold Criteria

	Maximum PPV (inch per second)	
Human Response	**Transient Sources [a]**	**Continuous/Frequent Intermittent Sources [b]**
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

[a] *Transient sources created a single isolated vibration event, such as blasting or drop balls.*
[b] *Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-an-seat equipment, vibratory pile drivers, and vibratory compaction equipment.*

Source: Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, Table 20, 2004.

Table 4.K-4

Guideline Vibration Damage Potential Threshold Criteria

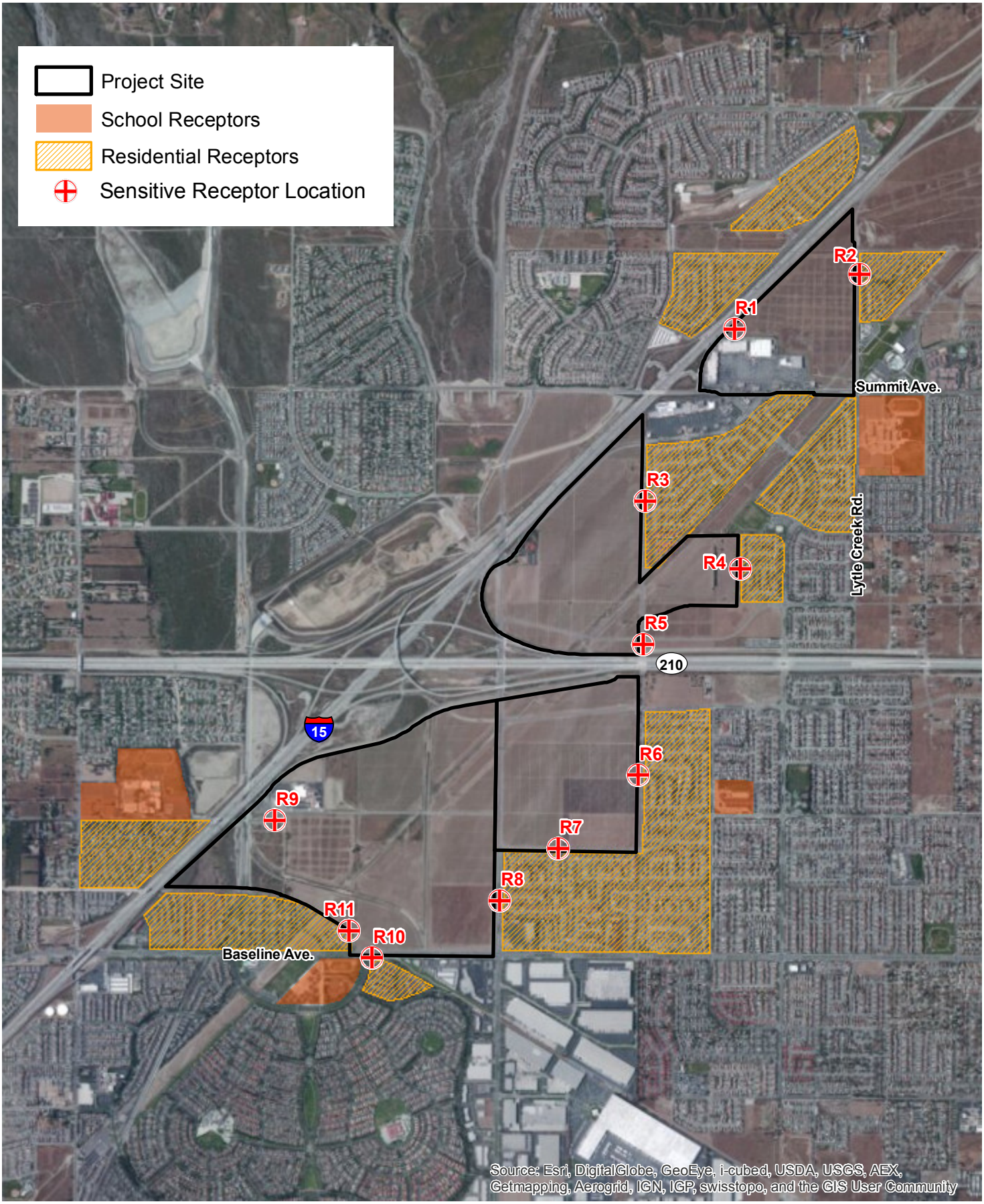
	Maximum PPV (inch per second)	
Structure and Condition	**Transient Sources [a]**	**Continuous/Frequent Intermittent Sources [b]**
Extremely fragile buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

[a] *Transient sources created a single isolated vibration event, such as blasting or drop balls.*
[b] *Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-an-seat equipment, vibratory pile drivers, and vibratory compaction equipment.*

Source: Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, Table 19, 2004.

industrial land uses. Existing noise sensitive land uses are limited to residential uses which are shown in **Figure 4.K-1**, *Noise Monitoring and Sensitive Receptors Locations*, which include the following:

- Residential units east of the project site:
- Single-family residences along Turin Way, Toscana Lane, and Pescara Way, approximately 50 feet east of the project site, on the east side of Lytle Creek Road north of Summit Avenue.



PCR

N

0 1,200 2,400 Feet

Noise Monitoring and Sensitive Receptor Locations

Westgate Specific Plan Project

Source: Aerial Express, 2010; PCR Services Corporation, 2012.

FIGURE

4.K-1

This page is intentionally blank.

- Single-family residences along Trapetto Drive, Blue Ridge Way, and Half Dome Drive on the east side of San Sevaine Road north of Lyster Avenue, approximately 50 feet east of the project site.
- Single-family residences along Ponte Court and Palladio Lane north of Sierra Lakes Parkway adjacent to the project site.
- Single-family residences along Cory Place, Royal Crest Place, Royal Crest Court, Oak Spring Drive, Elkhorn Drive, and Preston Drive on the east side of San Sevaine Road south of South Highland Avenue, approximately 50 feet east of the project site.
- Single-family residences along Royal Crest Place and Oak Valley Drive near the southeastern intersection of Walnut Street and San Sevaine Road, approximately 75 feet southeast of the project site.
- Single-family residences along Oregon Street and Hawaii Way on the east side of Cherry Avenue north of Baseline Avenue, approximately 90 feet east of the project site.
- Residential units south of the project site:
- Single-family residences along Reagan Drive and Madison Lane on the south side of Summit Avenue west of Lytle Creek Road, approximately 80 feet south of the project site
- Single-family residences along Idaho Street and Maine Street on the south side of Walnut Street east of Cherry Avenue, approximately 50 feet south of the project site.
- Single-family residences along Rideout Court on the south side of Baseline Avenue east of South Heritage Circle, approximately 110 feet south of the project site.
- Single-family residences along Stinson Court, Wake Court, Big Sur Street, Bodega Street, Kittyhawk Street, Webb Court, Bay Street, Las Palmas Drive, and Marysville Place on the south side of the Pacific Electric Bike Trail north of Baseline Avenue, approximately 60 feet south of the project site.
- Residential units west of the project site:
- Single-family residences along Williamson Road on the west side of Freeway 15, approximately 300 feet west of the project site.
- Single-family residences along Crane Street on the west side of Freeway 15 and Coyote Canyon Road north of Bridlepath Drive, approximately 350 feet west of the project site.
- Single-family residences along Petunia Street on the west side of Freeway 15 and Coyote Canyon Road north of Roadrunner Road, approximately 350 feet west of project site.
- Summit High School. High School located at the southeast corner of Summit Avenue and Lytle Creek Road, approximately 170 feet east of the project site.
- Heritage Intermediate School. Middle school located on the south side of Baseline Avenue approximately 400 feet to the south of the project site.
- Etiwanda High School. High School located along the north side of Victoria Street approximately 560 feet to the west of the project site.

(2) Ambient Noise Levels

Ambient noise measurements were made at eleven locations to characterize existing noise environment at proposed planning areas (PA), representing the existing nearby land uses in the vicinity of the project site as

discussed below, and depicted in Figure 4.K-1. As shown in Figure 2-7, *Proposed Land Use Plan*, in Chapter 2, *Project Description*, of this Draft EIR, the community is comprised of four villages. These villages, including their community structure and design, are discussed in the Table 2-1 of the Project Description. Long-term (24-hour) measurement was conducted at two locations (identified on Figure 1 as location R1 and R2, these monitoring locations represent the area of the development which includes future residential components) and short-term measurements were recorded at nine other locations; R3 through R11. The long-term ambient sound measurements at location R1 and R2 were conducted from Thursday, May 3, through Sunday, May 6, 2012. Short-term noise measurements were made on May 3, 2012 between the hours of 12:00 P.M. and 4:00 P.M. at locations R4 through R11 and on May 7, 2012 between the hours of 10:00 A.M. and 11:00 A.M. at location R3.

Noise measurements were conducted using Larson-Davis 820 Precision Integrated Sound Level Meter (SLM). The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute (ANSI) S1.4. All instruments were calibrated and operated according to the manufacturer's specification. The microphone was placed at a height of 5 feet above the local grade, at the following locations:

- Measurement Location R1: The noise measuring device (sound level meter) was placed near I-15 Devore Freeway approximately 100 feet from east of I-15. Location R1 represents the existing noise environment of proposed PA 2 (Residential-3a(R-3a)), PA 4 (R-2), PA 8 (R-3a) and PA-7 (Open Space / Private Park (OS/P2)) along I-15.
- Measurement Locations R2: The sound level meter was placed on Lytle Creek Road approximately 200 feet from the northeast corner of Lytle Creek Road and Toscana Lane. The measurement location R2 represents the existing noise environment of PA 4 (R-3) along Lytle Creek Road.
- Measurement Location R3: The sound level meter was placed on San Sevaine Road approximately 600 feet from the northeast corner of San Sevaine Road and Blue Ridge Way. Location R3 represents the existing noise environment of PA 16 (R-3a), PA 16a (OS/P2), PA 19 (R-3a), and PA 19a (OS/P2) along San Sevaine Road.
- Measurement Location R4: The sound level meter was placed on Sierra Lakes Parkway approximately 650 feet from the northwest corner of Sierra Lakes Parkway and Beech Avenue. This measurement location represents the existing noise environment of PA 22 (R-1) along Sierra Lakes Parkway.
- Measurement Location R5: The sound level meter was placed on N. Frontage Road approximately 400 feet from the southwest corner of N. Frontage Road and San Sevaine Road. This measurement location represents the existing noise environment of PA 26 (R-3a) along N. Frontage Road and 210 Freeway.
- Measurement Location R6: The sound level meter was placed on San Sevaine Road approximately 300 feet from the southeast corner of San Sevaine Road and Preston Drive. This measurement location represents the existing noise environment of PA 31 (R-3a) and PA 33 (High School(HS)) along San Sevaine Road.
- Measurement Location R7: The sound level meter was placed on Walnut Avenue approximately 700 feet from the southwest corner of Walnut Avenue and San Sevaine Road. This measurement location represents the existing noise environment of PA 33 (HS) and PA 38 (R-3a) along Walnut Avenue.

- Measurement Location R8: The sound level meter was placed on Cherry Avenue approximately 400 feet from the southeast corner of Cherry Avenue and Walnut Avenue. This measurement location represents the existing noise environment of PA 65 (R-2), PA 67 (R-3a), and PA 68 (Commercial Retail (C)) along Cherry Avenue.
- Measurement Location R9: The sound level meter was placed on Victoria Street approximately 4,000 feet from the southwest corner of Victoria Street and Cherry Avenue. Location R9 represents the existing noise environment of PA 53 (R-3a), PA 54 (R-2), and PA 55 along Victoria Street.
- Measurement Location R10: The sound level meter was placed on Baseline Avenue approximately 300 feet from the southeast corner of Baseline Avenue and South Heritage Circle. This measurement location represents the existing noise environment of PA 69 (R-3a) and PA 70 (R-2) along Baseline Avenue.
- Measurement Location R11: The sound level meter was placed on Pacific Electric Bike Trail approximately 500 feet from the northwest corner of Pacific Electric Bike Trail and Baseline Avenue. This measurement location represents the existing noise environment of PA 57, PA 60 (Open Space /Utility Corridor (OS/UC)), and PA 64 (R-2) near Pacific Electric Bike Trail.

As shown in **Table 4.K-5**, *Summary of Ambient Noise Measurements*, long-term (72-hour) measurements were conducted at locations R1 and R5 from Thursday, May 3, 2012 through Sunday, May 6, 2012. Short-term (15-minute) measurements were conducted at locations R2, R4, and R6 through R11 on Thursday, May 3, 2012 between the hours of 12:00 P.M. and 4:00 P.M. and at location R3 on Monday, May 7, 2012 between the hours of 10:00 A.M. and 11:00 A.M.

As also shown in Table 4.I-5, the measured noise level ranged from 62 dBA (L_{eq}) at monitoring location R5 to 64 dBA (L_{eq}) at monitoring location R3; from 63 dBA at monitoring location R6 to 72 dBA at monitoring location R8; from 52 dBA at monitoring location R11 to 70 dBA at monitoring location R10. The measured 80 dBA to 81 dBA CNEL levels at noise monitoring location R1 and 71 dBA to 73 dBA CNEL levels at noise monitoring locations R5 exceed the City's exterior noise compatibility guidelines for residential development, hotel, motel, and other noise sensitive uses, i.e. 65 dBA CNEL.

(3) Modeled Noise Conditions – Traffic Noise

To further characterize the area's noise environment, the CNEL noise levels generated by existing traffic on local roadways was calculated using a noise prediction model based on calculation methodologies provided in the California Department of Transportation (Caltrans) Technical Noise Supplement (TeNS) document and traffic data included in the Traffic Study for the proposed project.[7]

[7] *The roadway noise calculation procedures provided in the Caltrans TeNS are consistent with Federal Highway Administration RD-77-108 roadway noise prediction methodologies. This methodology allows for the definition of roadway configurations, barrier information (if any), and receiver locations.*

Table 4.K-5

Summary of Ambient Noise Measurements

Measurement Location, Day, and Time	Measured Ambient Noise Levels[a] (dBA) Daytime (7 A.M. to 10 P.M.) Hourly L_{eq}	Nighttime (10 P.M. to 7 A.M.) Hourly L_{eq}	24-Hour Average CNEL
R1			
5/03/12 (partial 12 hours)/ Thursday	75 – 76	72 – 74	N/A[b]
5/04/12 (full 24 hours)/ Friday	74 – 76	70 – 75	80
5/05/12 (full 24 hours)/ Saturday	74 – 76	72 – 75	81
5/06/12 (full 24 hours)/ Sunday	72 – 76	69 – 75	80
R2			
5/03/12 (12 P.M. to 1 P.M.) / Thursday	61	–	N/A[b]
R3			
5/03/12 (12 P.M. to 1 P.M.) / Thursday	64	–	N/A[b]
R4			
5/03/12 (1 P.M. to 2 P.M.) / Thursday	62	–	N/A[b]
R5			
5/03/12 (partial 12 hours)/ Thursday	65 – 71	65 – 66	N/A[b]
5/04/12 (full 24 hours)/ Friday	66 – 70	61 – 69	73
5/05/12 (full 24 hours)/ Saturday	65 – 68	64 – 68	73
5/06/12 (full 24 hours)/ Sunday	63 – 68	63 – 66	71
R6			
5/03/12 (1 P.M. to 2 P.M.) / Thursday	63	–	N/A[b]
R7			
5/03/12 (2 P.M. to 3 P.M.) / Thursday	68	–	N/A[b]
R8			
5/03/12 (2 P.M. to 3 P.M.) / Thursday	72	–	N/A[b]
R9			
5/07/12 (10 A.M. to 11 A.M.) / Monday	65	–	N/A[b]
R10			
5/03/12 (2 P.M. to 3 P.M.) / Thursday	70	–	N/A[b]
R11			
5/03/12 (3 P.M. to 4 P.M.) / Thursday	52	–	N/A[b]

[a] *Detailed measured noise data, including hourly L_{eq} levels, are included in Appendix I.*

[b] *The CNEL measurements are based on 24-hour measurements. Therefore, CNEL values are not estimated for locations R3 through R11.*

Source: PCR Services Corporation, 2012.

A model calibration test (i.e. actual sampled data) was performed at Walnut Street between, between Cherry Avenue and San Sevaine Road (R8) and Baseline Avenue, between North Heritage Circle and South Heritage Circle, for comparison to the noise level predicted by the noise prediction mode. A minimum of 15-minute noise recording was made concurrent with logging of actual traffic volumes and auto fleet mix (i.e., standard automobile, medium duty truck, or heavy duty truck). The traffic counts were entered into the noise model along with the observed speed, lane configuration, and distance to the roadway to calculate the traffic noise levels. The results of the traffic noise model calibration are provided in **Table 4.K-6**, *Traffic Noise Model Calibration Results*. As indicated, the noise model results are within less than 1 dBA of the measured noise

Table 4.K-6

Traffic Noise Model Calibration Results

Road Segment/Noise Measurement Location	Traffic Counts During Noise Readings 15-minutes (A.M./P.M.) Autos	Medium Trucks [a]	Heavy Trucks [b]	Measured Traffic Noise Levels L_{eq} (dBA)	Project Traffic Noise Model Predicted Noise Levels L_{eq} (dBA)	Difference between Predicted and Measured Levels dBA
Walnut Street/R8 (P.M.)	372	18	0	68.1	68.2	0.1
Baseline Avenue/R10 (P.M.)	549	3	2	69.8	70.1	0.3

[a] *Medium Truck – 2 axle trucks based on field observations.*
[b] *Heavy Truck – 3 or more axles trucks and buses based on field observations.*

Source: PCR Services Corporation, 2012.

levels, which is within the industry standard tolerance of the noise prediction model. Therefore, the project specific traffic noise prediction model is considered accurate and specific to project conditions.

The traffic noise prediction model calculates the 24-hour CNEL noise levels based on specific information including, average daily traffic volume (ADT), percentages of day, evening and nighttime traffic volumes relative to ADT, vehicle speed, and distance between the noise receptor and the roadway. Vehicle mix/distribution information used in the noise calculation is shown in **Table 4.K-7**, *Vehicle Mix for Traffic Noise Model*. As indicated in **Table 4.K-8**, *Predicted Existing Vehicular Traffic Noise Levels*, the calculated CNEL for the analyzed roadway segments as a result of existing traffic volumes ranged from 57.6 dBA CNEL to 70.8 dBA CNEL at a distance of 25 feet based on surface-street traffic volumes only. As shown therein, traffic related noise levels at the nearest sensitive receptors to each analyzed roadway segment exceed normally acceptable noise levels at the majority of the studied residential areas (i.e., 65 dBA CNEL or lower), except at residential uses along San Sevaine Road, Highland Avenue, Walnut Street, Lytle Creek Road, Sierra Lakes Parkway, Citrus Avenue, and Summit Avenue, between San Sevaine Road and Beech Avenue.

3. PROJECT IMPACTS

a. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including noise. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to noise would occur if the project would result in one or more of the following:

Threshold 1: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (refer to Impact Statement 4.K-1);

Table 4.K-7

Vehicle Mix for Traffic Noise Model

Vehicle Type	Percent of ADT			
	Daytime hours (7 A.M. to 7 P.M.)	Evening Hours (7 P.M. to 10 P.M.)	Nighttime Hours (10 P.M. to 7 A.M.)	Total
Automobile	78.4	9.8	9.8	98.0
Medium Truck[a]	0.8	0.1	0.1	1.0
Heavy Truck[b]	0.8	0.1	0.1	1.0

[a] *Medium Truck – 2 axle trucks based on field observations.*
[b] *Heavy Truck – 3 or more axles trucks and buses based on field observations.*

Source: PCR Services Corporation, 2012.

Threshold 2: Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels (refer to Impact Statement 4.K-2);

Threshold 3: A substantial permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project (refer to Impact Statement 4.K-3);

Threshold 4: A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (refer to Impact Statement 4.K-4);

Threshold 5: 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, would the project expose people residing or working in the project area to excessive noise levels (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A of this Draft EIR. No impact would occur in this regard.); or

Threshold 6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A of this Draft EIR. No impact would occur in this regard.).

Table 4.K-8

Predicted Existing Vehicular Traffic Noise Levels

Roadway Segment	Adjacent Land Use	Existing CNEL (dBA) at Referenced Distances from Roadway Right-of-Way	
		25 Feet	50 Feet
Cherry Avenue			
Between Sierra Lakes Parkway and SR-210 Freeway WB Ramps	Commercial	66.6	64.6
Between Highland Avenue and Walnut Street	Future Residential	69.4	67.6
Between Walnut Street and Baseline Avenue	Residential	69.6	67.8
Between Baseline Avenue and Foothill Boulevard	Commercial	69.9	68.1
South of Foothill Boulevard	Residential	69.1	67.0
Baseline Avenue			
West of Etiwanda Avenue	Residential	69.8	68.2
Between Etiwanda Avenue and I-15 Freeway SB Ramps	Residential	70.0	68.3
Between I-15 Freeway SB Ramps and Heritage Circle West	Residential	70.6	68.9
Between Heritage Circle West and Heritage Circle East	School	70.0	68.4
Between Heritage Circle East and Cherry Avenue	Residential	70.7	69.1
East of Cherry Avenue		70.8	69.1
San Sevaine Road			
Between Summit Avenue and Sierra Lake Parkway	Residential	59.2	57.1
Between Sierra Lake Parkway and Highland Avenue	Future Residential	59.3	57.2
Between Highland Avenue and Walnut Street	Residential	60.1	58.1
South of Walnut Street	Residential	60.9	58.8
Beech Avenue			
West of I-15 Freeway SB Ramps	Commercial	68.1	66.3
South of Summit Avenue	Residential	65.2	63.4
Summit Avenue			
Between San Sevaine Road and Beech Avenue	Residential	63.5	61.8
Between Beech Avenue and Lytle Creek Road	Residential	67.0	65.3
East of Lytle Creek Road	School	67.2	65.4
Highland Avenue			
Between Cherry Avenue and San Sevaine Road	Future Residential	63.0	60.9
East of San Sevaine Road	Residential	63.3	61.5
Walnut Street			
Between Cherry Avenue and San Sevaine Road	Residential	61.3	59.2
East of San Sevaine Road	Residential	59.4	57.6
Lytle Creek Road			
North of Summit Avenue	Park	61.2	59.1
South of Summit Avenue	Residential / School	64.0	62.0

Table 4.K-8 (Continued)

Predicted Existing Vehicular Traffic Noise Levels

Roadway Segment	Adjacent Land Use	Existing CNEL (dBA) at Referenced Distances from Roadway Right-of-Way	
		25 Feet	50 Feet
Sierra Lakes Parkway			
Between Cherry Avenue and San Sevaine Road	Future Residential	57.6	55.5
East of San Sevaine Road	Future Residential	60.8	58.7
Citrus Avenue			
Between Highland Avenue and Baseline Avenue	Residential	69.0	67.2

Source: PCR Services Corporation, 2012.

b. Methodology

(1) On-Site Construction Noise

Noise impacts from on-site construction, truck staging, and hauling are evaluated by determining the noise levels generated by the different types of construction activity, calculating the construction-related noise level at nearby sensitive receptor locations, and comparing these construction-related noise levels to existing ambient noise levels (i.e., noise levels without construction noise). More specifically, the following steps were undertaken to calculate construction-period noise impacts:

1. Ambient noise levels at surrounding sensitive receptor locations were estimated based on field measurement data (see Table 4.K-1);

2. Typical noise levels for each construction equipment were obtained from the Federal Highway Administration (FHWA) roadway construction noise model (RCNM);

3. Distances between construction site locations (noise source) and surrounding sensitive receptors were measured using project architectural drawings, Google Earth, and site plans;

4. The construction noise level was then calculated, in terms of hourly L_{eq}, for sensitive receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance; and

5. Construction noise levels were then compared to the construction noise significance thresholds identified below.

The City of Fontana does not have an established numeric significance criterion for construction noise. However, the FMC does include hours in which construction can occur and construction noise during such hours is exempt from the provisions of the noise ordinance. Therefore, the project would have a significant noise impact during construction if:

- Construction activities would occur outside the hours of 7:00 A.M. to 6:00 P.M. on weekdays, 8:00 A.M. to 5:00 P.M. on Saturdays.

(2) Off-Site Roadway Noise (Operation)

Roadway noise impacts to existing noise-sensitive receptors from the increase in vehicular traffic as a result of the proposed project have been evaluated using the Caltrans TeNS methodology based on the roadway traffic volume data provided in the Traffic Impact Study prepared for the proposed project. This methodology 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.

The City of Fontana does not have a noise threshold for traffic noise impacts. Thus, a conservative threshold of an increase in 3 dBA CNEL or more is utilized as a threshold, as this increase would represent a perceivable increase to humans over the existing ambient noise level. Therefore, the proposed project would have a significant impact on noise levels from off-site transportation sources if:

- Project-related traffic would cause ambient noise levels to increase by 3 dBA CNEL or more.

(3) Stationary Point-Source Noise (Operation)

The project would include the installation and operation of stationary noise sources such as rooftop mechanical equipment, emergency generators, trash compactors, and loading docks. Stationary point-source noise impacts have been evaluated by identifying the noise levels generated by the outdoor stationary noise sources, calculating the hourly L_{eq} noise level from each noise source at surrounding sensitive receiver property line locations, and comparing such noise levels to existing ambient noise levels. The proposed project would have a significant impact on noise levels from on-site stationary sources if:

- Project-related stationary noise sources generate noise levels that would exceed City's exterior noise levels shown in Table 4.K-2.

(4) Ground-Borne Vibration (Construction and Operation)

The City of Fontana does not have a significance threshold to assess vibration impacts during construction. Thus, the FTA and Caltrans standards described above are used to evaluate potential impacts related to project construction. All structures that are located within the immediate vicinity of the project site are considered "well engineered" (as opposed to "fragile" or "extremely fragile"). Therefore, impacts relative to ground-borne vibration would be considered significant if the following future event were to occur:

- Potential Building Damage - Project construction activities cause a PPV ground-borne vibration level to exceed 0.5 inches per second at any off- site older residential structures and 1.0 inches per second at any off-site newer residential structures.
- Potential Human Annoyance - Project construction and operation activities cause ground-borne vibration levels to exceed 0.04 inches per second PPV at off-site vibration sensitive receptors.

c. Project Design Features

As discussed in Chapter 2, *Project Description*, of this Draft EIR, the proposed Specific Plan would allow for the future development of up to 5,931 residential units at a range of densities, approximately 263 acres of commercial uses, approximately 148 acres of parks and open space, a 60-acre high school, two 12-acre elementary schools, and approximately 103 acres of roadways within the largely undeveloped 964-acre project area. The Specific Plan also includes development standards and design guidelines that would provide design features to reduce project-related noise. By providing jobs near housing, with retail, parks and schools within walking distance of compact residential villages, the Westgate Specific Plan residents would have less reliance on the automobile. This in turn would result in reduced traffic related noise and an overall healthier community.

d. Analysis of Project Impacts

(1) Violation of Noise Standards

Threshold	Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact 4.K-1: Project implementation could significantly impact adjacent noise sensitive receptors in the project area. Implementation of the prescribed mitigation measures would ensure that potentially significant noise impacts to on-site sensitive uses are reduced to a less than significant level. However, noise impacts on sensitive receptors from off-site traffic noise would be significant and unavoidable.

As the project builds out, on- and off-site noise levels would increase with contributions from project-generated traffic, and from typical residential and commercial activities on the project site itself. These potential noise impacts are discussed separately below.

(a) Off-Site Roadway Noise

Future roadway noise levels were calculated along various arterial segments adjacent to and within the proposed developments that would be utilized by project traffic. Roadway-noise attributable to project development was calculated using the traffic noise model previously described and compared to baseline noise levels that would occur under the "No Project" condition. According to the traffic study, Phase 1 of the development is projected to generate a total of approximately 25,745 daily vehicle trips, 1,736 of which would occur during the morning peak hour and 2,048 of which would occur during the evening peak hour. Build out of the development is projected to generate a total of approximately 84,579 daily vehicle trips, 9,807 of which would occur during the morning peak hour and 9,109 of which would occur during the evening peak hour. **Table 4.K-9**, *Off-Site Traffic Noise Analysis, Existing with Project*, and **Table 4.K-10**, *Off-Site Traffic Noise Analysis, Future with Project,* provide a summary of the off-site roadway noise analysis results. Included in this table are calculated CNEL noise levels at a reference distance of 25 feet for the roadway segments with noise sensitive uses for the following scenarios: (1) existing conditions; (2) existing with project phase 1; (3) exiting with project buildout; (4) future without project phase 1; (5) future with project phase 1; (6) future without project buildout; and (7) future with project buildout.

Table 4.K-9

Off-Site Traffic Noise Analysis, Existing with Project

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway Right-of-Way, CNEL (dBA)			Existing Project Phase I Increment [c] (B-A)	Existing Project Buildout Increment [d] (C-A)
	Existing (A)	Existing with Project Phase I (2018) [a] (B)	Existing with Project Build Out (2035) [b] (C)		
Cherry Avenue					
Between Sierra Lakes Parkway and SR-210 Freeway WB Ramps	66.8	68.6	71.1	1.8	4.3
Between Highland Avenue and Walnut Street	69.3	70.4	72.3	1.1	3.0
Between Walnut Street and Baseline Avenue	69.6	70.2	71.7	0.6	2.1
Between Baseline Avenue and Foothill Boulevard	69.7	70.2	71.5	0.5	1.8
South of Foothill Boulevard	68.1	68.5	69.8	0.4	1.7
Baseline Avenue					
West of Etiwanda Avenue	69.5	70.9	71.7	1.4	2.2
Between Etiwanda Avenue and I-15 Freeway SB Ramps	69.9	71.5	72.3	1.6	2.4
Between I-15 Freeway SB Ramps and Heritage Circle West	70.4	71.8	73.3	1.4	2.9
Between Heritage Circle West and Heritage Circle East	69.9	71.2	72.3	1.3	2.4
Between Heritage Circle East and Cherry Avenue	70.4	71.7	72.7	1.3	2.3
East of Cherry Avenue	70.9	71.5	71.9	0.6	1.0
San Sevaine Road					
Between Summit Avenue and Sierra Lake Parkway	59.5	63.9	67.1	4.4	7.6
Between Sierra Lake Parkway and Highland Avenue	61.0	62.7	66.6	1.7	5.6
Between Highland Avenue and Walnut Street	61.8	62.6	66.3	0.8	4.5
South of Walnut Street	61.0	60.9	64.5	-0.1	3.5
Beech Avenue					
West of I-15 Freeway SB Ramps	68.4	69.0	69.5	0.6	1.1
South of Summit Avenue	65.5	66.1	66.8	0.6	1.3
Summit Avenue					
Between San Sevaine Road and Beech Avenue	63.4	65.5	69.9	2.1	6.5
Between Beech Avenue and Lytle Creek Road	67.0	68.5	69.7	1.5	2.7
East of Lytle Creek Road	66.8	68.4	69.2	1.6	2.4
Highland Avenue					
Between Cherry Avenue and San Sevaine Road	63.2	64.8	68.1	1.6	4.9
East of San Sevaine Road	62.8	64.4	67.7	1.6	4.9

Table 4.K-9 (Continued)

Off-Site Traffic Noise Analysis, Existing With Project

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway Right-of-Way, CNEL (dBA)			Existing Project Phase I Increment [c] (B-A)	Existing Project Buildout Increment [d] (C-A)
	Existing (A)	Existing with Project Phase I (2018) [a] (B)	Existing with Project Build Out (2035) [b] (C)		
Walnut Street					
Between Cherry Avenue and San Sevaine Road	62.1	62.3	65.7	0.2	3.6
East of San Sevaine Road	60.2	61.8	62.8	1.6	2.6
Lytle Creek Road					
North of Summit Avenue	58.2	62.8	66.2	4.6	8.0
South of Summit Avenue	62.3	62.4	62.6	0.1	0.3
Sierra Lakes Parkway					
Between Cherry Avenue and San Sevaine Road	58.2	65.2	69.1	7.0	10.9
East of San Sevaine Road	59.7	66.2	69.5	6.5	9.8
Citrus Avenue					
Between Highland Avenue and Baseline Avenue	69.3	69.7	69.7	0.4	0.4

[a] *Include existing plus proposed project traffic Phase I.*
[b] *Include existing plus proposed project traffic Build Out.*
[c] *Increase due to Project-related traffic Phase I only at existing.*
[d] *Increase due to Project-related traffic Build Out only at existing.*

Source: PCR Services Corporation, 2012.

The project-generated traffic noise impact is determined by comparing the increase in noise levels and the project's significance threshold. As shown in Table 4.K-9, the incremental increase in traffic noise levels at off-site residential uses from project-related traffic would be 6.5 dBA for the project Phase I, which would occur along Sierra Lakes Parkway, east of San Sevaine Road, assuming existing geometric (roadway) configurations. For project buildout, the maximum noise increase of 10.9 dBA would occur along Sierra Lakes Parkway, between Cherry Avenue and San Sevaine Road. Project-related traffic would result in an incremental increase of more than 3.0 dBA CNEL at the following roadway segments:

- Cherry Avenue – between Sierra Lakes Parkway and SR-210 Freeway westbound ramps (commercial)
- Cherry Avenue – between Highland Avenue and Walnut Street (future residential)

Table 4.K-10

Off-Site Traffic Noise Analysis, Future with Project

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway Right-of-Way, CNEL (dBA)					Future Project Phase I Increment [c]	Future with Project Buildout Increment [d]	Cumulative Increment Phase I [b]	Cumulative Increment Buildout [b]
	Existing (A)	Future without Project Phase I (2018) (B)	Future without Project Buildout (2035) (C)	Future with Project Phase I (2018) [a] (D)	Future with Project Buildout (2035) [b] (E)	(D-B)	(E-C)	(D-A)	(E-A)
Cherry Avenue									
Between Sierra Lakes Parkway and SR-210 Freeway WB Ramps	66.8	67.3	68.6	67.8	71.1	0.5	2.5	1.0	4.3
Between Highland Avenue and Walnut Street	69.3	69.3	70.7	70.38	73.0	1.0	2.3	1.0	3.7
Between Walnut Street and Baseline Avenue	69.6	69.3	70.8	70.0	72.5	0.7	1.7	0.4	2.9
Between Baseline Avenue and Foothill Boulevard	69.7	70.0	71.0	70.4	72.3	0.4	1.3	0.7	2.6
South of Foothill Boulevard	68.1	68.8	70.6	69.1	71.6	0.3	1.0	1.0	3.5
Baseline Avenue									
West of Etiwanda Avenue	69.5	69.90	70.9	70.2	71.7	0.3	0.8	0.7	2.2
Between Etiwanda Avenue and I-15 Freeway SB Ramps	69.9	70.3	71.5	71.6	72.3	0.3	0.8	0.7	2.4
Between I-15 Freeway SB Ramps and Heritage Circle West	70.4	70.9	71.8	71.4	73.3	0.5	1.5	1.0	2.9
Between Heritage Circle West and Heritage Circle East	69.9	70.2	71.2	71.1	72.3	0.9	1.1	1.2	2.4
Between Heritage Circle East and Cherry Avenue	70.4	70.7	71.7	71.2	72.7	0.5	1.0	0.8	2.3
East of Cherry Avenue	70.9	71.1	71.5	71.2	71.0	0.1	0.4	0.3	1.0
San Sevaine Road									
Between Summit Avenue and Sierra Lake Parkway	59.5	61.0	63.9	62.2	67.1	1.2	3.2	2.7	7.6
Between Sierra Lake Parkway and Highland Avenue	61.0	61.4	62.7	62.4	66.6	1.0	3.9	1.4	5.6

Table 4.K-10 (Continued)

Off-Site Traffic Noise Analysis, Future with Project

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway Right-of-Way, CNEL (dBA)					Future Project Phase I Increment [c]	Future with Project Buildout Increment [d]	Cumulative Increment Phase I [b]	Cumulative Increment Buildout [b]
	Existing (A)	Future without Project Phase I (2018) (B)	Future without Project Buildout (2035) (C)	Future with Project Phase I (2018) [a] (D)	Future with Project Buildout (2035) [b] (E)	(D-B)	(E-C)	(D-A)	(E-A)
Between Highland Avenue and Walnut Street	61.8	62.2	62.6	62.2	66.3	0.0	3.7	0.4	4.5
South of Walnut Street	61.0	61.0	60.9	61.7	64.5	0.7	3.6	0.7	3.5
Beech Avenue									
West of I-15 Freeway SB Ramps	68.4	68.5	69.0	68.8	69.5	0.3	0.5	0.4	1.1
South of Summit Avenue	65.5	66.7	66.1	65.9	66.8	0.2	0.7	0.4	1.3
Summit Avenue									
Between San Sevaine Road and Beech Avenue	63.4	64.1	65.5	65.1	69.9	1.0	4.4	1.7	6.5
Between Beech Avenue and Lytle Creek Road	67.0	67.6	68.5	68.4	69.7	0.8	1.2	1.4	2.7
East of Lytle Creek Road	66.8	67.2	68.4	67.9	69.2	0.7	0.8	1.1	2.4
Highland Avenue									
Between Cherry Avenue and San Sevaine Road	63.2	63.6	64.8	64.7	68.1	1.1	3.3	1.5	4.9
East of San Sevaine Road	62.8	63.2	64.4	64.1	67.7	0.9	3.3	1.3	4.9
Walnut Street									
Between Cherry Avenue and San Sevaine Road	62.1	62.0	62.3	62.6	65.7	0.6	3.4	0.5	3.6
East of San Sevaine Road	60.2	60.5	61.8	60.6	62.8	0.1	1.0	0.4	2.6
Lytle Creek Road									
North of Summit Avenue	58.2	59.8	62.8	65.1	66.2	5.3	3.4	6.9	8.0
South of Summit Avenue	62.3	62.4	62.4	62.5	62.6	0.1	0.2	0.2	0.3
Sierra Lakes Parkway									
Between Cherry Avenue and San Sevaine Road	58.2	61.1	65.2	61.9	69.1	0.8	3.9	3.7	10.9

Table 4.K-10 (Continued)

Off-Site Traffic Noise Analysis, Future with Project

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway Right-of-Way, CNEL (dBA)					Future Project Phase I Increment [c]	Future with Project Buildout Increment [d]	Cumulative Increment Phase I [b]	Cumulative Increment Buildout [b]
	Existing (A)	Future without Project Phase I (2018) (B)	Future without Project Buildout (2035) (C)	Future with Project Phase I (2018) [a] (D)	Future with Project Buildout (2035) [b] (E)	(D-B)	(E-C)	(D-A)	(E-A)
East of San Sevaine Road	59.7	61.8	66.2	62.8	69.5	1.0	3.3	3.1	9.8
Citrus Avenue									
Between Highland Avenue and Baseline Avenue	69.3	69.4	69.7	69.4	69.7	0.0	0.0	0.1	0.4

[a] *Include existing plus proposed project traffic Phase I.*
[b] *Include existing plus proposed project traffic Build Out.*
[c] *Increase due to Project-related traffic Phase I only at existing.*
[d] *Increase due to Project-related traffic Build Out only at existing.*

Source: PCR Services Corporation, 2012.

- San Sevaine Road – between Summit Avenue and Sierra Lake Parkway (residential (wall) /future residential)
- San Sevaine Road – between Sierra Lake Parkway and Highland Avenue (commercial)
- San Sevaine Road – between Highland Avenue and Walnut Street (residential (wall) /future residential)
- San Sevaine Road – South of Walnut Street (residential (wall))
- Summit Avenue – between San Sevaine Road and Beech Avenue (residential (wall) / commercial)
- Highland Avenue – between Cherry Avenue and San Sevaine Road (future residential)
- Highland Avenue – east of San Sevaine Road (residential (wall))
- Walnut Street – between Cherry Avenue and San Sevaine Road (wall)
- Lytle Creek Road – north of Summit Avenue (residential (wall) / future residential)
- Sierra Lakes Parkway – between Cherry Avenue and San Sevaine Road (future residential)
- Sierra Lakes Parkway – east of San Sevaine Road (future residential)

The project-related traffic would increase noise levels over existing traffic conditions at the identified roadway segments from 4.4 to 7.0 dBA for the project Phase 1 and from 3.0 to 10.9 dBA for the project buildout, which is considered a significant noise increase. Although commercial uses are located along Cherry Avenue between Sierra Lakes Parkway and the SR-210 Freeway westbound ramps, and San Sevaine Road between Sierra Lake Parkway and Highland Avenue, there are no existing noise-sensitive uses along

these roadway segments that could be adversely affected by these uses. However, existing residential uses along San Sevaine Road between Summit Avenue and Sierra Lakes Parkway, San Sevaine Road between Highland Avenue and Walnut Street, Summit Avenue between San Sevaine Road and Beech Avenue, Highland Avenue east of San Sevaine Road, Walnut Street between Cherry Avenue and San Sevaine Road, and Lytle Creek Road north of Summit Avenue are all already developed with sound walls. Therefore, impacts would be significant and unavoidable on these roadway segments, as no further measures (e.g., additional sound walls or other barriers) are feasible at these locations.

In addition, the incremental increase in noise at off-site residential uses from project-related traffic, taking into consideration future roadway geometries and growth of ambient (non-project-related) traffic, was predicted. The future geometric conditions would include adding/removing/re-alignment of roadways. In addition, traffic models redistributed traffic to lesser congested roadways as congestion increases.[8] Therefore, on many roadway segments, traffic noise under existing conditions is predicted to be higher than under the proposed project buildout conditions.

As shown in Table 4.K-10, the maximum increase in project-related traffic noise levels for off-site existing residential uses would be 5.3 dBA for the project Phase I, which would occur along Lytle Creek Road, north of Summit Avenue. For project buildout, the maximum noise increase of 4.4 dBA would occur along Summit Avenue, between San Sevaine Road and Beech Avenue. Project-related traffic would result in an incremental increase of more than 3.0 dBA CNEL at the following roadway segments:

- San Sevaine Road – between Summit Avenue and Sierra Lake Parkway (residential (wall) /future residential)
- San Sevaine Road – between Sierra Lake Parkway and Highland Avenue (commercial)
- San Sevaine Road – between Highland Avenue and Walnut Street (residential (wall) /future residential)
- San Sevaine Road – South of Walnut Street (residential (wall)
- Summit Avenue – between San Sevaine Road and Beech Avenue (residential (wall) / commercial)
- Highland Avenue – between Cherry Avenue and San Sevaine Road (future residential)
- Highland Avenue – east of San Sevaine Road (residential (wall)
- Walnut Street – between Cherry Avenue and San Sevaine Road (wall)
- Lytle Creek Road – north of Summit Avenue (residential (wall) / future residential)
- Sierra Lakes Parkway – between Cherry Avenue and San Sevaine Road (future residential)
- Sierra Lakes Parkway – east of San Sevaine Road (future residential)

The project-related traffic would increase noise levels under future traffic conditions at the identified roadway segments up to 5.3 dBA for the project Phase 1 and from 3.2 to 4.4 dBA for the project buildout. Mitigation measures would be required for future residential uses along San Sevaine Road, between Highland Avenue and Walnut Street, Lytle Creek Road, north of Summit Avenue, Sierra Lakes Parkway,

[8] *Westgate Specific Plan, Traffic Impact Analysis (Revised), Kunzman Associates, Inc., December 2013.*

between Cherry Avenue and San Sevaine Road, and Sierra Lakes Parkway, between east of San Sevaine Road. With implementation of applicable mitigation measures, operational traffic-related noise impacts to on-site sensitive receptors would be less than significant.

As discussed in other sections of this Draft EIR, the Westgate Specific Plan allows for the potential development of up to 20.0 acres of R-4 residential uses within Planning Area 24, which would offset up to 20.0 acres of Mixed Use-1 business park uses within that Planning Area. The projected trip generation comparison calculations for Planning Area 24 are located in Table 2 of the Trip Generation Comparison Analysis (included in Appendix J of this Draft EIR).[9] The Mixed Use-1 designation in Planning Area 24 when compared to the R-4 high density residential designation is projected to generate a total of approximately 4,302 more daily vehicle trips, 46 less of which would occur during the morning peak hour and 219 more of which would occur during the evening peak hour. As a result, development of R-4 uses in Planning Area 24 would result in a slight decrease in roadway traffic during the morning peak hour and a slight increase in roadway traffic during the evening peak hour on roadways in the vicinity of the Planning Area, which include Sierra Lakes Parkway between Cherry Avenue and San Sevaine Road, Cherry Avenue between the I-15 Freeway and Highland Avenue, and Live Oak Avenue and San Sevaine Road between Summit Avenue and Highland Avenue. However, given that the development of high density residential uses in Planning Area 24 would result in changes in roadway traffic during the peak morning and evening hours, which would represent only a small percentage of the total roadway traffic volumes, roadway noise levels would change by a small fraction of a decibel compared to the values reported in Table 4.K-10 for roadway segments in the vicinity of Planning Area 24. Therefore, roadway noise levels, roadway noise impacts, and mitigation measures would be similar to those discussed above for development of only Mixed Use-1 business park uses within Planning Area 24.

(2) Groundborne Noise and Vibration

Threshold	Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impact 4.K-2: Construction and operation of future land uses under the proposed Specific Plan would produce groundborne noise and vibration. However, vibration velocities would not exceed allowable levels at the nearest vibration sensitive uses. Thus, construction-related and operational vibration impacts would be less than significant.

(a) Construction

Construction machinery and operations can 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, blasting and impact pile driving, would not be used for this project. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receptor buildings. The results from vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels.

[9] *Kunzman Associates, Inc., Westgate Specific Plan Trip Generation Comparison Analysis, November 2014.*

Ground-borne vibration from construction activities rarely reaches the levels that damage structures. The Federal Transit Association (FTA) has published standard vibration velocities, in terms of PPV, for construction equipment operations. The typical vibration PPV and RMS levels for construction equipment pieces anticipated to be used during project construction are listed in **Table 4.K-11**, *Typical Vibration Velocities for Potential Project Construction Equipment*.

Table 4.K-11

Typical Vibration Velocities for Potential Project Construction Equipment

	Reference Vibration Source Levels, PPV (inch/second)			
Equipment	**25 feet**	**50 feet**	**100 feet**	**200 feet**
Large bulldozer	0.089	0.031	0.011	0.004
Caisson drilling	0.089	0.031	0.011	0.004
Loaded trucks	0.076	0.027	0.010	0.003
Jackhammer	0.035	0.012	0.004	0.002
Small bulldozer	0.003	0.001	0.0004	0.0001

Source: USDOT Federal Transit Administration, 2006.

With regard to the proposed project, high levels of ground-borne vibration would be generated primarily during site clearing and grading activities and by off-site haul-truck traveling on surface streets. As such, ground-borne vibration impacts are therefore usually confined to short distances (i.e., 50 feet or less) from the source. As indicated in Table 4.I-11, vibration velocities from the operation of construction equipment would range from approximately 0.003 to 0.089 inches per second PPV at 25 feet from the equipment. Usually, ground-borne vibration decreases rapidly with distance. As indicated in Table 4.K-11, the vibration velocity of 0.089 inches per second PPV at a distance of 25 feet from construction equipment would be reduced to 0.031 inches per second PPV at 50 feet distance. At a distance of 100 feet from the source of activity, vibration velocities from the construction equipment would further reduce to 0.011 inch/second PPV.

The nearest sensitive residential receptors are approximately 50 feet from the project site are below:

- Single-family residences along Turin Way, Toscana Lane, and Pescara Way, approximately 50 feet east of the project site, on the east side of Lytle Creek Road north of Summit Avenue.
- Single-family residences along Trapetto Drive, Blue Ridge Way, and Half Dome Drive on the east side of San Sevaine Road north of Lyster Avenue, approximately 50 feet east of the project site.
- Single-family residences along Ponte Court and Palladio Lane north of Sierra Lakes Parkway.
- Single-family residences along Cory Place, Royal Crest Place, Royal Crest Court, Oak Spring Drive, Elkhorn Drive, and Preston Drive on the east side of San Sevaine Road south of South Highland Avenue, approximately 50 feet east of the project site.

- Single-family residences along Idaho Street and Maine Street on the south side of Walnut Street east of Cherry Avenue, approximately 50 feet south of the project site.

The vibration level of 0.089 inches per second PPV at 25 feet from a large bulldozer would be approximately 0.031 inches per second PPV at 50 feet distance. The estimated vibration level of 0.031 inches per second PPV at the nearest sensitive receptors is below the project's significance threshold of 0.5 inches per second for older residential structures and 0.04 inches per second PPV for potential human annoyance. Therefore, vibration impacts associated with construction activities would be less than significant.

(b) Operation

The proposed project would include typical residential and commercial-grade stationary mechanical and electrical equipment such as air handling units, condenser units, exhaust fans, and electrical emergency power generators, which would produce vibration. Ground-borne vibration generated by each of the above-mentioned activities would be similar to the existing vibration generated by existing sources (i.e., traffic on adjacent roadways) in the project area. The potential vibration impacts from all proposed project sources at the closest structure locations would be less than the significance threshold 0.04 inches per second PPV for perceptibility. As such, vibration impacts associated with operation of the project would be below the significance threshold and impacts would be less than significant.

(3) Permanent Noise Level Increases

Threshold	Would the project have a substantial permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project?

Impact 4.K-3: Project implementation would have a minimal effect on the existing noise environment adjacent to the project area. Thus, long-term noise impacts would be less than significant.

Future residents of the Westgate Specific Plan would generate and would be exposed to on-site noise sources typical of urban neighborhood related activities including; doors slamming, air conditioning units, lawn care equipment, radio/ stereos systems, domestic animals, etc. These noise sources contribute to the ambient noise levels experienced in all similarly-developed areas and typically do not exceed the noise standards for the types of land uses proposed on the Westgate Specific Plan. In addition, these noise sources are consistent with adjacent uses in the project vicinity. Therefore, residential-related point-source noise impacts would be less than significant.

On-site noise sources from commercial uses would normally include mechanical HVAC (Heating, Ventilating and Air Conditioning) equipment, loading dock, and trash collection. The on-site noise sources would be designed with noise control features, including screens and barriers, which would shield the noise sources to the sensitive receptors to meet the City's exterior noise standards. As such, significant noise impacts would not occur due to on-site stationary noise sources.

(4) Temporary Noise Level Increases

Threshold	Would the project have a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact 4.K-4: Construction activities associated with project implementation would be conducted within the allowable hours specified in the City's Municipal Code. Compliance with the requirements of the City's Municipal Code would ensure that construction noise impacts are less than significant.

Construction of the project would be phased in an orderly manner, with full buildout of the Specific Plan anticipated to occur by 2035. Each of the four villages may be developed concurrently or in any sequence provided that all infrastructure required to serve each area is provided to the satisfaction of the City engineering department. The timing of each area would be subject to local, regional, and national market conditions. However, the project Applicant has identified the project components to be implemented as part of the first phase of development, which is anticipated to be constructed and operational by 2018. Phase 1 development would include uses proposed within each of the four villages, which are intended to complement existing on- and off-site development and minimize the need for expanded infrastructure facilities in the short-term.

Noise impacts from construction activities are generally a function of the noise generated by construction equipment, the equipment location, the sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Construction activities at the project site would include four stages: (1) site grading; (2) fine grading and foundation work; (3) building construction; and (4) paving. Each stage involves the use of different kinds of construction equipment, and therefore has its own distinct noise characteristics. Site grading typically involves the use of such equipment as an excavator, grader, dozer, scraper, sweeper, tractor/loader/backhoe, and other equipment. Fine grading and foundation work involves the use of such equipment as a rubber tired dozer, grader, scraper, and tractor/ loader/backhoe. Building construction typically involves the use of such equipment as aerial lift, air compressor, concrete saw, cranes, forklift, tractor/loader/backhoe, and other equipment. Paving requires the use of air compressor, cement and mortar mixer, paver, pavement scarifier, roller, and other equipment. The proposed project would be constructed using typical construction techniques. No blasting or impact pile driving would be used.

Construction of the project would be phased in an orderly manner, with full buildout of the Specific Plan anticipated to occur by 2035. Each of the four villages may be developed concurrently or in any sequence provided that all infrastructure required to serve each area is provided to the satisfaction of the City engineering department. The timing of each area would be subject to local, regional, and national market conditions. However, the project Applicant has identified the project components to be implemented as part of the first phase of development, which is anticipated to be constructed and operational by 2018. Phase 1 development would include uses proposed within each of the four villages, which are intended to complement existing on- and off-site development and minimize the need for expanded infrastructure facilities in the short-term.

Individual pieces of construction equipment that would likely be used for project construction produce maximum noise levels of 75 dBA to 90 dBA at a reference distance of 50 feet from the noise source, as shown in **Table 4.K-12**, *Maximum Noise Levels and Estimated Usage of Typical Construction Equipment*. Pile driving systems and equipment would not be used. These maximum noise levels would occur when equipment is operating under full power conditions or during "impact" activities, such as jack hammering or sawing. However, equipment used on construction sites often operate under less than full power conditions, or part power. To more accurately characterize construction-period noise levels, the average (Hourly L_{eq}) noise level associated with each construction stage is calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage and are typically attributable to multiple pieces of equipment operating simultaneously.

Table 4.K-12

Maximum Noise Levels and Estimated Usage of Typical Construction Equipment

Type of Equipment	Estimated Usage Factor	Reference Noise Level at 50 feet, L_{max}
Aerial Lift	20%	75
Air Compressor	50%	78
Cement and Mortar Mixer	40%	79
Concrete Saw	20%	90
Crane	40%	81
Dozer	40%	82
Excavator	40%	81
Forklift	10%	75
Grader	40%	85
Rubber Tired Loader	40%	82
Other Equipment	50%	85
Paver	50%	77
Pavement Scarifier	20%	90
Roller	20%	80
Scraper	40%	84
Tractor / Loader / Backhoe	25%	80
Vacuum Street Sweeper	10%	82

Source: FHWA 2005; and PCR Services Corporation, 2012.

Construction noise levels were estimated based on an industry standard sound attenuation rate of 6 dB per doubling of distance for point sources (e.g., construction equipment). Within the analysis, all construction equipment was assumed to operate simultaneously at the construction area nearest to potentially affected residential receptors. These assumptions represent a worst-case noise scenario as construction activities would routinely be spread throughout the construction site further away from noise sensitive receptors. In addition, noise from different construction stages, which have the potential to occur simultaneously were added together to provide a composite construction noise level.

A summary of noise level increases by receptor location and phase of construction activity is provided in **Table 4.K-13**, *Estimate of Construction Noise Levels at Off-Site Sensitive Receiver Locations*. The estimated noise levels represent a worst-case scenario and the actual sound occurring at various locations would be less than that indicated in Table 4.I-13 due to four factors: 1) the construction activities are analyzed as if they were occurring along the perimeter of the project site, whereas construction would typically occur throughout the site and only periodically at the perimeter of the site; 2) there are times when the construction activities are fewer than the maximums identified here; 3) there are times when the construction equipment operates at less than full power level, and 4) noise sensitive receptors that are located farther away from the project site would experience less construction noise, as sound diminishes away from the source, and due to intervening buildings between the source and receiver.

Table 4.K-13

Estimate of Construction Noise Levels at Off-Site Sensitive Receiver Locations

Noise Sensitive Receptor [a]	Nearest Distance from Construction Activity to Noise Receptor	Estimated Construction Noise Levels at the Noise Sensitive Receptor by Construction Phase [b] Hourly L_{eq} (dBA)			
		Site Grading	Fine Grading/Foundation	Building Construction	Paving
Residential units east of the project site	50	87	85	88	87
Residential units south of the project site	50	87	85	88	87
Residential units west of the project site	50	87	85	88	87

[a] *Estimated construction noise levels represent the worst-case scenario when noise generators are located closest to the receptors and are not expected to last the entire construction duration.*[c]

Source: PCR Services Corporation, 2012.

Estimates of the greatest impacts that might occur during construction hours at nearby sensitive receptors are shown in Table 4.K-13. Construction activities would temporarily increase the existing ambient noise for receptors in close proximity to construction sites. Construction activities would temporary increase the existing ambient noise in close proximity of the construction site. Construction activities would be required to comply with the City's allowable hours as described above and would be temporary in nature. Since temporary construction noise is exempt from the City's noise ordinance requirements, construction-related noise would result in a less than significant noise impact.

(5) Consistency With Regulatory Framework

As discussed above, the proposed project would, to the extent feasible, comply with all applicable laws and regulations related to noise and vibration. However, although mobile-source noise levels resulting from operation of future on-site land uses would exceed acceptable noise levels at off-site sensitive receptor locations, the proposed project would not conflict with the noise standards established in the FMC as those standards apply only to stationary noise sources, the noise impacts of which were determined to be less than significant as discussed above. Additionally, the City of Fontana General Plan Noise Element contains various goals and policies related to noise generation within the City that are applicable to the proposed project. As shown in **Table 4.K-14**, *General Plan Consistency Analysis*, the proposed project would be consistent with the applicable goals and policies of the Fontana General Plan Noise Element. Because the proposed project would be consistent with the noise standards of the FMC and would not conflict the applicable goals and policies contained in the General Plan Noise Element, impacts in this regard would be considered less than significant.

Table 4.K-14

General Plan Consistency Analysis

Noise Element	
Goal #1: Our City protects its sensitive land uses from excessive noise through diligent planning.	
Policy 1-1: New sensitive land uses shall be prohibited in incompatible areas.	**Consistent.** The proposed Specific Plan has been designed to located noise-sensitive land uses such as residential communities and schools toward the interior of the project site, away from major noise sources such as the I-15 and SR-210 freeways and more noise-intensive uses such as light industrial and commercial uses. However, Residential uses within Planning Areas 2, 6, 8, and 26 would be located adjacent to or in relatively close proximity to these freeway corridors, which would result in adverse impacts to these noise-sensitive uses if appropriate mitigation is not provided. Accordingly, as required by mitigation measures below, sounds walls would be constructed between future residential uses in Planning Areas 2, 6, 8, and 26 and the I-15 and SR-210 freeway corridors, respectively, in order to reduce vehicle-related noise to acceptable levels. Given implementation of applicable mitigation measures, future residential uses would not be located in incompatible areas on the project site.
Policy 1-2: Noise-tolerant land uses shall be guided into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of the adjacent airports.	**Consistent.** Less noise-sensitive uses such as mixed-use business parks and light industrial uses would generally be located along the I-15 and SR-210 corridors as these uses are more compatible with higher noise levels, and would serve to buffer noise-sensitive uses from such ambient noise levels. However, residential uses within Planning Areas 2, 6, 8, and 26 would be located adjacent to or in relatively close proximity to these freeway corridors, which would result in adverse impacts to these noise-sensitive uses if appropriate mitigation is not provided. Accordingly, as required by mitigation measures below, sounds walls would be constructed between future residential uses in Planning Areas 2, 6, 8, and 26 and the I-15 and SR-210 freeway corridors, respectively, in order to reduce vehicle-related noise to acceptable levels. Given implementation of applicable mitigation measures, on-site residential uses would not be significantly affected by noise from these nearby transportation corridors.
Policy 1-3: The following uses shall be considered noise-sensitive and discouraged in areas in excess of 65 dBA CNEL: • Residential Uses; • Hospitals; • Rest Homes; • Long Term Care Facilities; and • Mental Care Facilities;	**Consistent.** Under the proposed Specific Plan, noise-sensitive land uses would be located in areas with lower ambient noise levels in order to minimize potential noise-related impacts.

Table 4.K-14 (Continued)

General Plan Consistency Analysis

Policy 1-4: The following uses shall be considered noise-sensitive and discouraged in areas in excess of 65 Leq(12): • Schools; • Libraries; • Places of worship; and • Passive Recreation Uses	**Consistent.** Under the proposed Specific Plan, noise-sensitive land uses would be located in areas with lower ambient noise levels in order to minimize potential noise-related impacts.
Policy 1-5: Where sensitive uses are to be placed along transportation routes, mitigation shall be provided to ensure compliance with State-mandated noise levels.	**Consistent.** Although in general noise-sensitive land uses are located away from major transportation corridors under the proposed Specific Plan, a limited amount of residential uses would be located in proximity to the SR-210 corridor (Planning Area 26) and I-15 corridor (Planning Areas 2, 6, and 8), which could be adversely affected by traffic noise. However, as required by mitigation measures below, sounds walls would be constructed between future residential uses in Planning Areas 2, 6, 8, and 26 and the I-15 and SR-210 freeway corridors, respectively, in order to reduce vehicle-related noise to acceptable levels. Given implementation of applicable mitigation measures, proposed on-site residential uses would not be exposed to noise levels above State-mandated limits.
Policy 1-6: The State of California Office of Planning and Research General Plan Guidelines shall be followed with respect to acoustical study requirements.	**Consistent.** Future acoustical analysis for future development projects on-site would be prepared consistent with applicable guidelines, including those of the State Office of Planning and Research.
Policy 1-7: Noise spillover or encroachment from commercial, industrial and educational land uses shall be minimized into adjoining residential neighborhoods or noise-sensitive uses.	**Consistent.** The proposed Specific Plan includes development standards and design guidelines that require adequate setbacks, landscaping, screening, and other measures that serve to reduce noise spillover.
Goal #2: Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible noise on its residents.	
Policy 2-1: All noise sections of the State Motor Vehicle Code shall be enforced.	**Consistent.** The proposed project would not limit the enforceability of the State Motor Vehicle Code with respect to noise.
Policy 2-2: On-road trucking activities shall be regulated in the City to ensure noise impacts are minimized.	**Consistent.** Future development projects on-site that involve trucking activities (including construction-related truck trips) would comply with all applicable City requirements intended to reduce truck-related noise.
Policy 2-3: Roads shall be maintained such that the paving is in good condition and free of cracks, bumps, and potholes.	**Consistent.** On-site roads would be maintained to minimize traffic noise, as required by the City.

Table 4.K-14 (Continued)

General Plan Consistency Analysis

Policy 2-4: Noise mitigation measures shall be included in the design of new roadway projects in the City.	**Consistent.** The proposed project includes various mitigation measures intended to reduce noise impacts, including traffic noise.
Policy 2-5: Development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses shall provide appropriate mitigation measures.	**Consistent.** Implementation of the proposed Specific Plan would increase traffic levels in the project area, and therefore would also increase traffic-related noise, in some cases in proximity to noise-sensitive land uses. Mitigation measures are provided, however, to minimize traffic-related noise impacts, though impacts in this regard would remain significant and unavoidable.
Policy 2-6: Noise mitigation practices shall be employed 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.	**Consistent.** Design considerations have been made, as required by the City, for all proposed streets within the project boundaries. Mitigation features such as setbacks, landscape buffers, and walls or other effective noise barriers would be implemented along roadways as development occurs on-site.
Goal #3: Our City's residents are protected from the negative effects of "spill over" noise in our community.	
Policy 3-1: Residential land uses and areas identified as noise sensitive shall be protected from excessive noise from non-transportation sources including industrial, commercial, and residential activities and equipment.	**Consistent.** The proposed Specific Plan has been designed to provide appropriate physical separation between noise-intensive and noise-sensitive uses; further, design features such as setbacks, landscaping, walls, and other physical noise buffers would be employed, as necessary, to reduce noise-related effects on sensitive uses.
Policy 3-2: Projects located in commercial areas shall not exceed stationary-source noise standards at the property line of proximate residential or commercial uses, as appropriate.	**Consistent.** As discussed above, noise impacts from stationary point-sources would not exceed established noise thresholds.
Policy 3-3: Industrial uses shall not exceed commercial or residential stationary-source noise standards at the most proximate land uses, as appropriate. (Industrial noise may spill over to proximate industrial uses so long as the combined noise does not exceed the appropriate industrial standards.)	**Consistent.** As discussed above, noise impacts from stationary point-sources would not exceed established noise thresholds.
Policy 3-4: Non-transportation noise shall be considered in land use planning decisions.	**Consistent.** The proposed Specific Plan has been designed to account for non-transportation noise, and as such, non-compatible land uses are located with adequate physical separation such that non-vehicular noise conflicts are minimized or avoided.
Policy 3-5: Construction shall be performed as quietly as feasible when performed in proximity to residential or other noise sensitive land uses.	**Consistent.** As discussed above, construction activities would be carried out in compliance with the City's noise standards, which would generally preclude substantial adverse effects on nearby sensitive land uses. Furthermore, construction-related noise is not expected to

Table 4.K-14 (Continued)

General Plan Consistency Analysis

	exceed established thresholds, and therefore impacts have been determined to be less than significant.

Source: PCR Services Corporation, 2014

4. CUMULATIVE IMPACTS

As discussed in Chapter 3, Basis for Cumulative Analysis, of this EIR, there are four related projects located in the vicinity of the project site. Proposed project developments and other planned developments (related projects) would likely contribute to cumulative noise impacts. The potential for cumulative noise impacts to occur are specific to the location of each related project and their stationary noise sources from the project site, as well as the cumulative traffic that these projects would add to on the surrounding roadway network.

a. Construction-Related Noise

Noise from on-site construction activities would only affect the areas immediately adjacent to the project site, less than 500 feet from the construction site, due to sound attenuation provided by the distance and the intervening buildings between the construction sites and the noise sensitive receptors. Since the timing of the construction activities for these related projects cannot be defined, any quantitative analysis that assumes multiple, concurrent construction projects would be entirely speculative. Construction activities from the cumulative projects would generate noise at each project sites and cumulative construction noise could exceed ambient noise levels at the nearest residences. However, those noise levels would be intermittent, temporary and would cease at the end of the construction phase, and would comply with time restrictions and other relevant provisions in the City's Municipal Code. Noise associated with cumulative construction activities would be reduced to the degree reasonably and technically feasible through proposed mitigation measures for each individual project and compliance with locally adopted and enforced noise ordinances. As construction activities would be required to comply with the City's allowable hours as described above and would be temporary, construction-related noise would result in a less than significant noise impact.

b. Operational Noise

The project site and surrounding area would be developed and would generate noise that would contribute to cumulative noise from a number of community noise sources including vehicle travel, mechanical equipment (e.g., HVAC systems), and lawn maintenance activities. Due to City's provisions that limit on-site stationary-source noise such as outdoor air-conditioning equipment, noise levels would be less than significant at the property line for each related project. As the project's stationary-source impacts would be less than significant, stationary-source noise impacts attributable to cumulative development would also be less than significant. However, the proposed project and other developments in the project would produce traffic volumes that are capable of generating a roadway noise impacts.

Cumulative noise impacts due to roadway traffic have been assessed based on the difference between noise generated by existing traffic volumes and traffic volumes projected at the project buildout (Year 2035) and are presented in Table 4.I-13. As indicated in Table 11, the following five roadway segments would have a cumulative noise increase ranged from 3.5 to 10.9 dBA CNEL, which would exceed the project's 3 dBA significance threshold and would be considered significant impacts:

- Cherry Avenue – between Sierra Lakes Parkway and SR-210 Freeway westbound ramps (commercial)
- Cherry Avenue – between Highland Avenue and Walnut Street (future residential)
- Cherry Avenue – south of Foothill Boulevard (existing residential)
- San Sevaine Road – between Summit Avenue and Sierra Lake Parkway (existing residential with wall / future residential)
- San Sevaine Road – between Sierra Lake Parkway and Highland Avenue (commercial)
- San Sevaine Road – between Highland Avenue and Walnut Street (existing residential with wall / future residential)
- San Sevaine Road – South of Walnut Street (residential (wall)
- Summit Avenue – between San Sevaine Road and Beech Avenue (existing residential with wall / commercial)
- Highland Avenue – between Cherry Avenue and San Sevaine Road (future residential)
- Highland Avenue – east of San Sevaine Road (existing residential with wall)
- Walnut Street – between Cherry Avenue and San Sevaine Road (existing residential with wall)
- Lytle Creek Road – north of Summit Avenue (existing residential with wall / future residential)
- Sierra Lakes Parkway – between Cherry Avenue and San Sevaine Road (future residential)
- Sierra Lakes Parkway –east of San Sevaine Road (future residential)

As discussed above, commercial uses are located along Cherry Avenue, between Sierra Lakes Parkway and SR-210 Freeway westbound ramps and San Sevaine Road, between Sierra Lake Parkway and Highland Avenue. There are no existing noise sensitive uses along these roadway segments. Residential uses along Cherry Avenue – south of Foothill Boulevard are not developed with sound walls. In addition, existing residential uses along Baseline Avenue, between Etiwanda Avenue and I-15 Freeway SB Ramps, Highland Avenue, east of San Sevaine Road, Baseline Avenue, between I-15 Freeway SB Ramps and Heritage Circle West, Baseline Avenue, between Heritage Circle West and Heritage Circle East, San Sevaine Road, between Summit Avenue and Sierra Lake Parkway, San Sevaine Road, between Highland Avenue and Walnut Street, Beech Avenue, south of Summit Avenue, Summit Avenue, between San Sevaine Road and Beech Avenue, and Lytle Creek Road, north of Summit Avenue are developed with sound walls. Therefore, impacts would be significant and unavoidable on these roadway segments.

Mitigation measures would be required for future residential uses along Cherry Avenue, between Highland Avenue and Walnut Street, Cherry Avenue, between Highland Avenue and Walnut Street, San Sevaine Road, between Summit Avenue and Sierra Lake Parkway, San Sevaine Road, between Highland Avenue and Walnut Street, Highland Avenue, between Cherry Avenue and San Sevaine Road, Lytle Creek Road, north of Summit

Avenue, Sierra Lakes Parkway, between Cherry Avenue and San Sevaine Road, and Sierra Lakes Parkway, east of San Sevaine Road. With implementation of applicable mitigation measures, traffic noise impacts on these roadways would be reduced to less than significant.

Overall, however, cumulative mobile-source noise impacts would remain significant and unavoidable.

5. MITIGATION MEASURES

Mitigation Measure K-1: Prior to approval of design review permits for sensitive uses, such as residential uses, libraries, daycare facilities, neighborhood parks and playgrounds, planned for areas forecasted to exceed an exterior noise level of 65 CNEL (based on Table 4.K-13 of this Draft EIR), the following shall occur:

a) An acoustical analysis shall be performed for residential structures to ensure that interior noise levels due to exterior sources would be at or below 45 CNEL. For these residential use areas, it may be necessary for the windows to be able to remain closed to ensure that interior noise levels meet the interior design standard of 45 CNEL. Consequently the design for these units may need to include mechanical ventilation or air conditioning systems to provide a habitable interior environment with the windows closed based on the results of the interior acoustical analysis.

b) To reduce exterior noise levels to 65 CNEL or lower at outdoor sensitive uses (i.e., residential courtyards, parks, and passive recreation areas), a combination of sound barrier walls, earthen berms, and landscaping shall be designed and implemented by a qualified acoustical consultant. Alternatively, outdoor uses shall be located behind buildings (not facing traffic corridors) in a manner that shields outdoor sensitive uses from roadway noise and reduces the exterior noise level to 65 CNEL or below.

c) Prior to occupancy of residential uses in Planning Areas 2, 6, and 8, the project applicant shall construct a 20-foot-high sound wall or equivalent physical barrier at the residential property line along the east side of the I-15 Freeway in order to reduce mobile-source noise to acceptable levels. The specific type and design of the physical barrier to be employed at this location shall be determined by the results of the design-specific acoustical analysis noted above.

d) Prior to occupancy of proposed residential uses in Planning Areas 24 and 26, the project applicant shall construct a 15-foot-high sound wall or equivalent physical barrier at the residential property line along the north side of the Route 210 Freeway in order to reduce mobile-source noise to acceptable levels. The specific type and design of the physical barrier to be employed at this location shall be determined by the results of the design-specific acoustical analysis noted above.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction-related noise and vibration impacts to existing off-site and future on-site sensitive uses would be less than significant and no mitigation is necessary. The proposed project's stationary source noise impacts to on- and off-site sensitive uses during project operation would be less than significant and no

mitigation measures are required. In addition, mitigation provided would ensure that interior noise environments of on-site residential structures meet State and City noise insulation requirements, and therefore potential traffic-related noise impacts on future on-site residential structures would be reduced to a less than significant level. Impacts associated with consistency with applicable plans, policies, and regulations would also be less than significant.

However, off-site traffic-related noise impacts would be significant and unavoidable for the existing residential uses in the surrounding area since no additional mitigation measures would be feasible (i.e., sound walls are already in place). As such, if the City of Fontana approves the project, the City shall be required to cite their findings in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
L. POPULATION AND HOUSING

1. INTRODUCTION

This section addresses the potential population and housing effects of the proposed project (as well as indirect population growth from employment) in the context of the local area (City of Fontana), the San Bernardino County subregion, and the Southern California Association of Governments (SCAG) regional area of the proposed project. The analysis evaluates the proposed project's population and housing effects in relation to adopted growth forecasts and relevant policies and programs. Demographic data and projections presented in this section are primarily based on SCAG forecasts contained in the SCAG 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted in April 2012. The Housing Element of the City's General Plan, adopted in 2010, includes the City's goals, policies, and programs to address housing needs in the City. A discussion of the proposed project's consistency with the applicable goals, policies and programs of the Housing Element is also provided in this section.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) On-Site Conditions

The majority of 964-acre project area is vacant land, which was historically used for vineyards. However, the Falcon Ridge Town Center, with approximately 415,000 square feet of commercial retail uses, has been completed within the Specific Plan boundaries directly north of Summit Avenue. Also, one multi-tenant office building also exists on the project site and is located along Cherry Avenue just north of SR-210, and between Baseline Avenue and SR-210, the California Department of Transportation (Caltrans) has recently occupied a new 124,000-square-foot Transportation Management Facility and Southern Regional Lab. No existing housing is located within the Specific Plan area, and therefore no permanent population exists on-site; however, existing retail and office uses in the project area employ an estimated

No other development currently exists within the Specific Plan area.

(2) Demographic Analysis of the Areas

The project area is located within the regional area of SCAG, the subregional area of San Bernardino County, and the local area of the City of Fontana demographic areas. The largest area is the regional area of SCAG, which includes 14 subregions, including San Bernardino County. The San Bernardino County subregion consists of the cities of Adelanto, Apple Valley, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa, Yucca Valley, and many unincorporated areas. The local area boundary of the project area is the City of Fontana. **Table 4.L-1**, *Population, Housing, and Employment Summary*, below, discusses the population, employment, and housing numbers for the local, subregion, and regional areas for the year 2008 based on SCAG data.

Table 4.L-1

Population, Housing, and Employment Summary

	Total Population	Total Households [a]	Total Employment
Local Area			
City of Fontana	193,900	48,600	47,600
Subregional Area			
San Bernardino County	2,016,000	606,000	701,000
Regional Area			
SCAG	17,895,000	5,814,000	7,738,000

[a] *SCAG's growth forecasts reflect the number of households present within an area rather than the number of housing units.*

Source: PCR Services Corporation based on data presented in Table 18 of the SCAG 2012 RTP/SCS projections, April 2012.

As shown in Table 4.L-1 and according to the data contained in the 2012 SCAG RTP/SCS, for 2008 the City of Fontana has an estimated population of approximately 193,900 residents, approximately 48,600 households, and 47,600 employees. The San Bernardino County subregional area has a residential population of approximately 2,016,000 residents, a household total of approximately 606,000 households, and approximately 701,000 employees. The SCAG regional area has a total residential population of 17,895,000 residents, approximately 5,814,000 households, and approximately 7,738,000 employees.

c. Projections and Trends

The 2012 RTP/SCS provides data on projected population, housing, and employment at various geographical levels within the SCAG region. The following analysis will provide an overview of the projections and trends anticipated for population, housing, and employment in relation to the project as provided by SCAG. The SCAG projection data for population, housing, and employment are shown in **Table 4.L-2**, *Population, Housing, and Employment Projections*, below. In correlation with each trend, population, housing and employment within the City are anticipated to increase through the year 2035. Job/housing ratio projections are provided in **Table 4.L-3**, *Job/Housing Ratio Projections*.

(1) Population

According to SCAG's regional forecast, the population will increase in all geographic zones during the years between 2008 and 2035. In the local area of City of Fontana, the percentage growth is an approximate 34.25 percent increase between the years 2008 and 2035. During the same time period, the population growth in the subregional area of San Bernardino County is forecasted to have a percentage increase of 36.41 percent, and an approximate percentage increase of 23.45 percent for the regional area of SCAG.

(2) Housing

The SCAG housing forecasts indicate that the housing growth in the local area of the City of Fontana is projected to increase by approximately 37.24 percent between the years of 2008 and 2035. During the same time period, the housing growth for the subregional area of San Bernardino County is forecasted to be

Table 4.L-2

Population, Housing, and Employment Projections

Geographic Zone	Actual 2008	Projected 2020	Projected 2035	2008-2035 Growth [c]	2008-2035 Percentage Change (%)
Population					
Local Area	193,000	222,700	259,100	66,100	+34.25
Subregional Area [a]	2,016,000	2,268,000	2,750,000	734,000	+36.41
Regional Area	17,895,000	19,663,000	22,091,000	4,196,000	+23.45
Housing					
Local Area	48,600	57,500	66,700	18,100	+37.24
Subregional Area [a]	606,000	698,000	847,000	241,000	+39.77
Regional Area	5,814,000	6,458,000	7,325,000	1,511,000	+25.99
Employment					
Local Area	47,600	53,700	69,000	21,400	+44.96
Subregional Area [a]	701,000	810,000	1,059,000	358,000	+51.07
Regional Area	7,738,000	8,414,000	9,441,000	1,703,000	+22.01

[a] *2008-2035 growth was calculated by taking the difference between Projected 2035 and actual 2008.*

Source: PCR Services Corporation based on data presented in Table 18 of the SCAG 2012 RTP/SCS projections, April 2012.

Table 4.L-3

Job/Housing Ratio Projections [a, b]

Geographic Zone	2008	Projected 2020	Projected 2035
Local Area	0.93	0.89	0.99
Subregional Area	1.10	1.11	1.19
Regional Area	1.27	1.24	1.23

[a] *Job/Housing Ratio is calculated by dividing the employment and housing forecasted number.*

[b] *The number of houses used for calculating the jobs/housing ratio was determined by multiplying the number of households by 1.05 percent, which is the average vacancy rate.*

Source: PCR Services Corporation based on data presented in Table 18 of the SCAG 2012 RTP/SCS projections, April 2012.

approximately 39.77 percent. The housing forecast for the regional area of SCAG is estimated to experience an increase of 25.99 percent. The large increase in housing within the local and subregional areas can be attributed to the County's growing population and residential development to accommodate it.

(3) Employment

According to SCAG, the local area of the City of Fontana would have an employment percent increase of approximately 44.96 percent between the years of 2008 and 2035. Employment in the subregional area of the San Bernardino County is projected to increase by 51.07 percent while the regional area of SCAG is

projected to increase 22.01 percent, during the same time period. The increase of employment to the City, the San Bernardino County and SCAG regions is the result of a rapidly growing population within the Inland Empire and high desert portions of the County of San Bernardino where there exists large amounts of undeveloped land that can be converted to urban uses.

(4) Job/Housing Ratio

A jobs-housing balance is the distribution of employment relative to the distribution of workers within a given geographic area. A job/housing ratio of 1:1 indicates that there is a job for every one household. As such, for ratios below 1.0, those areas are considered to have jobs deficit and housing surplus, or "housing-rich". For ratios above 1.0, those areas are considered to have a job surplus, or "job-rich" and a housing deficit. As identified by SCAG, the ideal average job/housing ratio in the SCAG region would be 1.25.

As shown above for the year 2008, the local area of the City of Fontana has a job/housing ratio of 0.93, the subregional area of San Bernardino County has a ratio of 1.10, and the regional area of SCAG has a ratio of 1.27. Within the local area, the job/housing ratio is expected to increase from 0.93 to 0.99 between 2008 and 2035. The subregional area's job/housing ratio is also expected to increase from 2008 to 2035 with a job/housing ratio of 1.10, and 1.19, respectively. The job/housing ratio for the SCAG regional area will also increase, but remains close to the ideal SCAG ratio of 1.25. With a job/housing ratio of 1.27 for 2008 and 1.23 for 2035, there would be a job surplus within the SCAG region. While the regional subregional areas would be considered "job rich" with a housing deficit, the local area will be slightly "housing rich" and will not meet the ideal 1.25 job/housing ratio. As population continues to increase in the City of Fontana and San Bernardino County, future housing demands would be met, but new jobs would need to be created in order to meet the ideal average job/housing ratio of 1.25 as identified by SCAG. However, the project site will include commercial retail, office, and light industrial uses and is surrounded by existing infrastructure, which would be able to provide jobs for new residents and help make up for the low job/housing ratio within the City.

b. Regulatory Framework

(1) Regional Level

The project is located within the jurisdiction of the Southern California Association of Governments (SCAG). SCAG is a Joint Powers Agency established under California Government Code Section 6502 et seq. Pursuant to federal and state law, SCAG serves as a Council of Governments, a Regional Transportation Planning Agency, and the Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. SCAG's mandated responsibilities include developing plans and policies with respect to the region's population growth, transportation programs, air quality, housing, and economic development. Specifically, SCAG is responsible for preparing the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Regional Housing Needs Assessment (RHNA), in coordination with other state and local agencies. These documents include population, employment, and housing projections for the region and 14 subregions. As noted previously, the project site is located within the San Bernardino County subregion.

(a) Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The 2012-2035 RTP/SCS is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system in the SCAG region, which is composed of six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region, and includes short- and long-range population, housing, and employment projections for local, subregional, and regional geographies that are utilized for regional planning efforts.

(b) Regional Housing Needs Assessment

A RHNA, most recently adopted and approved by the SCAG Regional Council on October 4, 2012, includes an assessment of regional housing needs for very low income, low income, moderate income, and above moderate income groups for the planning period from January 2014 through June 2021.[1] The RHNA is used by local communities to address land use planning, prioritize local resource allocation, and decide how to address identified existing and future housing needs resulting from population, employment, and household growth. There are 48,600 housing units in the City as of 2008. According to the RHNA, the housing needs for the City of Fontana include a total of 5,977 additional dwelling units, of which 1,442 will be very low income, 974 low income, 1,090 moderate income, and 2,471 above moderate income housing.

(2) Subregional Level

The project site is located within the San Bernardino County subregion and includes the cities of Adelanto, Apple Valley, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa, Yucca Valley, and many unincorporated areas. San Bernardino County assists SCAG in the review of regionally significant development within the County and prepares growth projections in population, households, and employment. SCAG adopts regional growth projections based on figures developed by San Bernardino County for SCAG's transportation and air quality elements, and other regional programs.

(3) Local Level

(a) City of Fontana General Plan

The City's General Plan is a long-range comprehensive plan that addresses the future development and conservation directions for the community. The General Plan is a policy document that guides all aspects of land use within the City. The current General Plan is the product of a comprehensive update completed in October 2003 that was a major overhaul of the previous General Plan. The General Plan established land use policies for a 20-year planning horizon.

[1] *Southern California Association of Governments website: http://www.scag.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf. Accessed February 2014.*

3. PROJECT IMPACTS

a. Methodology

The population and housing analysis consists of a comparison of the project's proposed development and estimated population, housing, and employment to the expected forecasted SCAG projections for the years 2008 through 2035 for the three geographic areas. The analysis addresses impacts at the local (City of Fontana), subregional (San Bernardino County), and regional (SCAG) areas. The analysis also evaluates the project's estimated population, housing, and employment and its compatibility with SCAG projections and related policies applicable to the project area.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including population and housing. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to population and housing would occur if the project would result in one or more of the following:

Threshold 1: Induce substantial population growth in an area, either directly (e.g. by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure) (refer to Impact Statement 4.L-1);

Threshold 2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.); or

Threshold 3: Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.).

c. Project Design Features

The proposed project would develop new commercial retail, office, light industrial, residential, educational, and recreational uses on approximately 964 acres of land. Specifically, the proposed Specific Plan allows for the future on-site development of up to 6,410 residential units, 138.7 acres of office uses, 11.5acres of new commercial retail uses (excluding retail uses within the existing 39.4-acre Falcon Ridge Town Center), 94.0 acres of light industrial uses, and 84.0 acres of new public schools, including two elementary schools and one high school.[2]

The proposed project would provide new housing opportunities to the local, subregional and regional areas, which would help alleviate project population growth to the geographic areas. In addition, the project would provide new employment opportunities to a currently underutilized site.

[2] *If R-4 residential uses are developed on up to 20.0 acres within Planning Area 24, office uses would be reduced by 18 acres and light industrial uses would be reduced by 2 acres, for a total office and light industrial acreage of 120.7 acres and 92.0 acres, respectively.*

d. Analysis of Project Impacts

Threshold Would the project induce substantial population growth in an area, either directly (e.g. by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?

Impact 4.L-1 Implementation of the proposed project would not induce substantial population, housing, or employment growth in the project area beyond that anticipated by SCAG projections. This impact is considered less than significant.

(1) Construction Impacts

Future projects developed within the project area would generate construction workers at any one time during the demolition, grading and excavation, and building construction and finishing phases. However, individual construction projects would not necessarily generate new employment within the region. Rather, construction workers move from project to project and are somewhat mobile. To the extent that future development projects support and contribute to the pool of construction workers, the overall impacts of Specific Plan implementation would be considered beneficial. Since construction activities related to the proposed project would not exceed expected growth nor alter the location, distribution, density, or growth rate of construction employment through the local, subregional, and regional area, construction-related employment impacts would be less than significant.

(2) Operational Impacts

(a) Population Growth

Using the average household size of 3.97 persons per unit for occupied housing in the City (based on actual 2008 Census data), the following population estimates were derived.[3] In addition, the total of indirect residential growth was also estimated by conservatively assuming that 25 percent of employees generated by the project would relocate within the City to be in closer proximity of their job site.

The proposed project would generate a direct residential population total of up to 25,448 residents (or 21,478 residents if no residential uses are developed within Planning Area 24) and approximately 3,460 indirect residents generated by the influx of new employment opportunities.[4] This would generate a total of28,908 new residents to the project area.

The residential population increase to the City associated with the project is compared to the expected population increase for the years between 2008 and 2035 in the local, subregional, and regional areas. **Table 4.L-4**, *Proposed Project Population, Household, and Employment Impacts Between the Years of 2008 and 2035*, below, shows the project's population increase in relation to the three geographic areas. The maximum project-related direct and indirect increase of 28,908 residents to the City would represent a total

[3] *The 3.97 average household size for the City of Fontana was taken from 2008 Census data as included in Table 18 of the 2012 SCAG RTP/SCS.*

[4] *It is estimated approximately 25 percent of employees are assumed to contribute to the Specific Plan's indirect population growth. Employment generation is based on empirical employment data by industry provided in the "Employment Density Study Summary Report" prepared for the Southern California Association of Governments by The Natelson Company, Inc. (October 2001).*

Table 4.L-4

Proposed Project Population, Household, and Employment Impacts Between the Years of 2008 and 2035

	Population [a]	Project Percent of Growth [b] (%)	Household [a]	Project Percent of Growth [b] (%)	Employment [a]	Project Percent of Growth [b] (%)
Net New from Proposed Project[c]	*28,908*		*6,410*		*3,485*	
Local Area	66,100	43.73	18,100	35.41	59,016	5.91
Subregional Area	734,000	3.94	241,000	2.66	180,676	1.93
Regional Area	4,196,000	0.69	1,511,000	0.42	4,490,246	0.08

[a] *The local, subregional, and regional area numbers represent the 2008-2035 growth projections as provided in Table 4.L-2* above.

[b] *Percent difference calculated by dividing the project's net new growth by the 2008-2035 growth projections.*

[c] *Project-related growth is based on 16.80 employees per acre of office use, 12.60 employees per acre of retail use, 6.92 employees per acre of industrial use, 6.59 employees per acre of elementary school use, and 3.35 employees per acre of high school use per data presented in Table B-1 of the "Employment Density Study Summary Report", prepared for SCAG by The Natelson Company (October 2001). Project-related housing growth includes 1,000 residential units that could be developed on 20.0 acres within Planning Area 24, for a total of 6,410 total residential units. In order to present a conservative analysis, the employment and indirect population growth associated with the 20.0 acres of Mixed Use business park uses in Planning Area 24 that would be converted to high density residential uses under this scenario have also been included.*

Source: PCR Services Corporation, 2014; SCAG, 2012; and The Natelson Company, 2001.

of 43.73 percent, 3.94 percent, and 0.69 percent of the population growth projected by SCAG for the local, subregional, and regional areas, respectively, between the years of 2008 and 2035, as seen in Table 4.L-4.

As shown below, these percent increases do not exceed the forecasted growth set forth by SCAG. In addition, the project population growth would not substantially alter the location or growth rate of the population projected and forecasted for the City of Fontana, the San Bernardino County subregion, and SCAG region. Hence, the proposed project would not result in a significant population impact.

(b) Household Growth

The project would be able to develop a maximum of 6,410 new residential dwelling units, all of which would represent a net increase to the area, as no housing currently exists on-site. As presented in Table 4.L-4, the project would represent 35.41 percent, 2.66 percent, and 0.42 percent of the household growth projected by SCAG for the local, subregional, and regional areas between the years of 2008 and 2035, respectively. The proposed housing units are designated as detached single-family and attached and detached multi-family residential units, and as shown in Table 4.L-4, the addition of new housing units are well within the SCAG housing growth projections for the City of Fontana, San Bernardino County subregion, and the SCAG region. By creating new housing units within the project area, the proposed project would support applicable housing policies of SCAG's RTP/SCS and housing allocation goals of the RHNA, and would substantially help meet the housing demands of the growing population of the City.

Furthermore, the development of new commercial uses to the project area would also increase the amount of indirect residents that may potentially move to the area due to employment, thus increasing the need for

housing units in the area. It is estimated that 25 percent of new employment positions added to the area would generate an indirect population of 3,460 residents. The growth of indirect residents has been accounted for as part of the population, employment, and housing growth estimate resulting in a conservative analysis. Thus, the estimated proposed project housing would be adequate to meet the growth of the direct and indirect residents. Lastly, the project site is located in an urban area already served by existing infrastructure and an established transportation system, whereby the proposed mix of uses would help provide a balance of jobs and housing.

New housing numbers proposed by the project are well within official SCAG forecasted estimates up to the year 2035, and the addition of new housing to the area is considered a beneficial impact pursuant to regional and housing policy. In addition, the maximum potential indirect housing demand would also be adequately met by proposed on-site housing units. As such, impacts to housing growth would not result in significant impacts and would thus be considered less than significant.

(c) Employment Growth

The proposed project would generate new job opportunities to the City that would increase the amount of employment within the project area. Specifically, implementation of the proposed Specific Plan generate an estimated 2,330 employees from office uses, 145 employees from retail uses, 651 employees from light industrial uses, 158 employees from elementary schools, and 201 employees from the high school, for a total net employment increase of 3,485 jobs within the Specific Plan area. As shown in Table 4.L-4, this would be an increase of 5.91 percent, 1.93 percent, and 0.08 percent of the projected SCAG employment growth estimated between the years 2008 and 2035. This employment increase to the area is due to the development of new job opportunities within the Specific Plan area.

Based on the above analysis, the net increase of employees associated with the project would result from the development of new office, retail, light industrial, and educational uses within the Specific Plan area. This increase of employment would be substantial and would significantly contribute to the SCAG employment forecasts for the local, subregional, and regional area. Based on the net increase of employees to the City, employment within the local, subregional, and regional area would still be within the SCAG forecasted employment growth projections and would still provide new employment to the City. As such, impacts associated with employment growth would be less than significant.

(3) Policy and Regulatory Consistency

(a) Regional Level

The goals, policies, and objectives in the various plans described above address two aims that are applicable to the proposed project. The first aim is to support housing and employment needs at the local, subregional, and regional levels. The intent is to meet all future needs in a manner that is consistent with expected projections. The second aim is to broaden the extent of housing and employment opportunities to a broad array of populations. The following discussion addresses the project's relationship to these two aims.

As the project would not exceed forecasted housing projections, the project's net increase of residential units would make a contribution to the creation of needed housing stock, and would thus support SCAG policies and projections. Furthermore, the housing projections and needs identified in the RTP/SCS and the RHNA, respectively, both identify considerable amounts of new housing that is needed in order to meet the growing

population needs of the three demographic areas analyzed. The proposed project would add up to a maximum of 6,410 residential units to the general housing supply and would contribute to housing availability and opportunity in the area. According to the 2014-2021 RHNA, the San Bernardino County subregion where the project is located is in need of a total of 57,207 dwelling units of which 13,399 would be very low income housing, 9,265 low income, 10,490 moderate income, and 24,053 above moderate income housing. Hence, the proposed project's overall contribution to the housing stock would be beneficial, and its development would not have adverse effects on the existing or future availability of housing for other sectors. As such, the project would be consistent with applicable SCAG policies regarding population, housing, and employment, and therefore, impacts would be less than significant.

(b) Local Level

The City of Fontana General Plan includes several goals within the Housing Element that relate to housing. An analysis of the proposed Specific Plan's consistency with each of the applicable goals contained in the Housing Element is presented below in **Table 4.L-5**, *General Plan Consistency Analysis*. As indicated in Table 4.L-1, the proposed Westgate Specific Plan would be consistent with the applicable goals of the General Plan Housing Element with respect to population, housing, and employment. As such, impacts in this regard would be less than significant.

4. CUMULATIVE IMPACTS

Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR provides a list of projects that are planned or are under construction in the proposed project study area. Four related projects, which are approved Specific Plans within the City of Fontana, have been identified in the proposed project's study area, and would potentially contribute to a cumulative population, housing, and employment impact when combined with the proposed Specific Plan. **Table 4.L-6**, *Cumulative Population, Housing, and Employment Generation*, below, summarizes the cumulative growth associated with implementation of the proposed project and related projects.

As shown in Table 4.L-6, the cumulative population, housing, and employment projections total 53,002 residents, 13,350 housing units, and 4,744 employees, respectively. Relative to SCAG growth projections at the local, subregional, and regional levels for the 2008 to 2035 timeframe, this represents 80.19, 7.22, and 1.26 percent of overall population growth; 73.76, 5.54, and 0.88 percent of overall housing growth; and 8.04, 2.63, and 0.11 percent of overall employment growth, respectively. As such, since cumulative growth associated with the proposed project and related cumulative development is within the City is within SCAG's 2008-2035 growth projections, impacts related to population, housing, and employment would be less than significant.

Consistency with Applicable Plans and Policies

The analysis above provides an assessment of project population, housing, and employment in comparison with local, subregional, and regional growth forecasts, which also accounts for planned or reasonably foreseeable development within each jurisdiction in the local area, subregional area, and regional area. Therefore, the analysis is both a project-level and cumulative analysis. As stated above, the increase of population, housing, and employment associated with the project would be with the forecasted population, housing, and employment projections for the local area of City of Fontana, San Bernardino subregional area,

Table 4.L-5

General Plan Consistency Analysis

Fontana General Plan Housing Element	
Goal/Policy	**Project Consistency Statement**
Goal #1: Conserve and improve the condition of the existing standard affordable housing stock.	**Consistent.** The proposed Specific Plan would not directly affect any existing residential uses or the City's ability to conserve and improve the condition of existing standard affordable housing stock.
Goal #2: Assist in the development of adequate housing to meet the needs of Extremely Low-, Very Low-, Low-and Moderate-Income households.	**Consistent.** The proposed project would provide a range of housing types for a variety of income levels, which may include housing for Very Low-, Low-, and Moderate-Income households. Nonetheless, even if none of the proposed future residential uses are for Very Low, Low, and Moderate Income households, the proposed Specific Plan would not limit the City's ability to meet its RHNA housing allocation goals or provide housing to meet the needs of all income levels in other parts of the City.
Goal #3: Identify adequate housing sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income groups.	**Consistent.** The proposed Specific Plan allows for the future development of residential uses with a broad range of densities and multiple income levels.
Goal #4: Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement and development of housing.	**Consistent.** The proposed project would allow for the future development of up to 6,410 residential units on the project site.
Goal #5: Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin or color.	**Consistent.** On-site housing would be provided to all potential future residents irrespective of race, religion, sex, marital status, ancestry, national origin or color.

Source: PCR Services Corporation, 2013

and SCAG region. Furthermore, cumulative development, similar to the project, would also be required to support applicable policies provided by SCAG and the City of Fontana General Plan. As such, implementation of the project would not result in significant cumulative impacts associated with population, housing, and employment and no mitigation measures are required.

5. MITIGATION MEASURES

No mitigation measures are required.

Table 4.L-6

Cumulative Population, Housing, and Employment Generation

Related Project	Residential (units)	Office (acres)	Retail (acres)	Industrial (acres)	Elementary School (acres)	High School (acres)	
Arboretum Specific Plan	3,526	-	8.8	-	46.0	-	
Ventana Specific Plan	842	8.3	4.9	-	-	-	
Summit at Rosena Specific Plan	856	-	1.0	-	12.0	-	
Citrus Heights North Specific Plan	530[a]	-	-	-	-	-	
Subtotal Related Projects	*5,754*	*8.3*	*14.7*	*0.0*	*58.0*	*0.0*	
Proposed Project	***6,410***	***138.7***	***55.3***	***94.0***	***24.0***	***60.0***	
TOTAL	**12,164**	**147.0**	**70.0**	**94.0**	**82.0**	**60.0**	
Cumulative Growth Estimate							**Total**
Population (residents)	48,291	2,451	877	647	536	200	**53,002**
Housing (units)	12,164	617	221	163	135	50	**13,350**
Employment (employees)	-	2,470	882	651	540	201	**4,744**

[a] *The Citrus Heights North Specific Plan was approved for a total of 1,154 residential units (606 single-family and 548 multi-family); however, approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed, resulting in 530 units yet to be constructed.*

Source: PCR Services Corporation, 2012

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-related and cumulative impacts associated with population, housing, and employment growth would be less than significant.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
M. PUBLIC SERVICES

1. INTRODUCTION

This section analyzes the proposed project's potential effects on fire protection and emergency medical services, police protection, schools, parks/recreation, and libraries in the project area.

Fire protection and emergency medical services for the City of Fontana are provided by the Fontana Fire Protection District (FFPD), which is contracted through the San Bernardino County Fire Department (SBCFD). The analysis of impacts to FFPD service area addresses fire protection facilities and services, response times, emergency access, and water "fire flow" (i.e. water available for fire-fighting). The analysis of fire protection and emergency medical services is based, in part, on information provided by SBCFD, while information regarding fire flow capabilities is based on data presented in the *Westgate Specific Plan Infrastructure Study*, which is included in Appendix L of this Draft EIR.

Police protection services within the City are provided by the Fontana Police Department (FPD). The evaluation of police protection services in this section addresses potential impacts that could occur due to construction activities and the increased residential population associated with the proposed project. This analysis focuses on the FPD facilities that currently serve the project area and the ability of the FPD to provide police protection services to future development on-site.

Public school facilities in the project area are operated by the Etiwanda School District (ESD) and Chaffey Joint Unified High School District (CJUHSD). The analysis presented in this section estimates the number of students that would be generated by the proposed project using ESD and CJUHSD student generation estimates and focuses on whether USD and CJUHSD school facilities would have sufficient available capacity to accommodate these students.

Parks and recreational facilities in the project area are provided by the City of Fontana and the County of San Bernardino. The project's provisions for park and recreational facilities and demand associated with residential occupants are evaluated in this section in light of applicable City goals and regulatory requirements. Information regarding existing service ratios, as well as existing parks and recreational facilities surrounding the project site, was provided in part by the Fontana Community Services Department (CSD).

Library services in the project area are provided by the County of San Bernardino. This section describes existing library facilities and services in the project area, and provides an analysis of potential impacts on these facilities and services that would occur as a result of the proposed project. The analysis addresses available library capacity and whether it is sufficient to accommodate the population growth generated by the proposed project. The analysis is based in part on information provided by San Bernardino County Library (SBCL).

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Fire Protection and Emergency Medical Services

In July 2005, the San Bernardino County Board of Supervisors initiated the reorganization of its fire operations. Following this action, the County filed an application with the San Bernardino Local Agency Formation Commission (LAFCO) to review and consider the reorganization of the San Bernardino County Fire Department. The purpose of the proposed fire reorganization was to achieve the most effective and efficient delivery of services for fire protection, emergency response, paramedic, ambulance, and disaster preparedness to residents and landowners. In response to the County Board's plan to reorganize fire protection services, the Fontana City Council initiated and subsequently filed with San Bernardino LAFCO an alternative proposal for the provision of fire protection. The City proposed the creation of a subsidiary district and appointment of the City Council as the governing body of the new district. The service boundary of the Fontana Fire Protection District (FFPD) includes Fontana's corporate limits and the County areas within the City's sphere of influence. As of July 2008, the FFPD has assumed the responsibilities provided by the County of San Bernardino, although the City now contracts with the San Bernardino County Fire Department for specific fire and emergency services. The services provided by the FFPD include the following:

- **Fires** – The Fontana Fire Protection District responds to all types of fires, including structure fires, vegetation fires, those involving vehicles or aircraft, and investigation of miscellaneous fires or open burning activities.
- **Medical Aid** – These incidents account for most of the Fire District's responses, from trauma or accident patients to cardiac or stroke patients, and all other types of injuries or medical conditions.
- **Hazardous Materials** – The Fire District investigates and mitigates all types of hazardous materials spills, exposures, and releases, and will investigate unknown types of materials to protect citizens and the environment.
- **Rescue** – Many situations such as swift water, steep terrain, vehicle collisions, confined spaces, and structural collapses require specialized knowledge and equipment to perform a rescue an incident.
- **Public Assist** – This includes many types of minor emergencies, such as children locked in cars, broken water lines, electrical hazards, or anything necessary to protect the safety of the citizens of the community.
- **Other Responses** – Acts of terrorism, natural disasters, and other such things are examples of incidents that the FFPD's all-risk approach to fulfilling its duty and protecting the community at all times.

The City of Fontana as a whole comprises FFPD's jurisdiction, which itself is located within SBCFD's Valley Division (Division 1). Division 1 includes 15 existing fire stations, two planned new fire stations, and one contract station, and is staffed by one Division Chief, six Battalion Chiefs, 39 Captains, 33 Engineers, 57 Firefighters, nine Limited-Term Firefighters, and 111 Paid Call Firefighters.[1] Division 1 apparatus includes

[1] *San Bernardino County Fire Department. 2010 Annual Report. www.sbcfire.org/admin/AnnualReports/2010_Fire_Annual_Report.pdf*

21 fire engines, three ladder trucks, seven brush engines, five brush patrol trucks, one hazardous materials response vehicle, five squad vehicles, five water tenders, and two rescue vehicles. Three FFPD/SBCFD fire stations currently exist in proximity to the Specific Plan area, including the following:

- **Fire Station 79** – Fire Station 79 is located at 5075 Coyote Canyon Road in the City of Fontana, approximately 800 feet north of the northernmost end of the Specific Plan boundary across the I-15 freeway.
- **Fire Station 78** – Fire Station 78 is located at 7110 Citrus Avenue in the City of Fontana, approximately 1.5 miles east of the Specific Plan boundary.
- **Fire Station 73** – Fire Station 73 is located at 14360 Arrow Boulevard in the City of Fontana, approximately 1.5 miles south of the Specific Plan's southern boundary.

The City currently collects Development Fees of behalf of the FFPD in the amount of $164.00 per residential dwelling unit, $0.25 per square foot of commercial development, and $0.10 per square foot of industrial development.[2]

(2) Police Protection

The Fontana Police Department currently has 179 sworn positions and 86 non-sworn positions.[3] The Fontana Police Department headquarters is located at 17005 Upland Avenue, just east of City Hall. The Police Department also operates the Southridge Contact Station at the southwest corner of Live Oak Avenue and Village Drive at 11500 Live Oak Avenue (within the SBCFD Fire Station 74). This Contact Station is used by officers for reporting but is not staffed. The Fontana Police Department also operates a Contact Station within the Summit Heights Gateway shopping center (north Fontana), as well as a Contact Station at 17122 Slover Avenue, within the Palm Court Shopping Center.

The City recently expanded its primary police facility near City Hall. The objective of this project was to expand usable space within the FPD headquarters for the next five to ten years, plus build an underground shooting range. The previous facility's 26,000-square-foot underground parking garage and adjacent office areas were remodeled to expand the locker rooms, weight room, report writing area, sergeant's office, and property/evidence storage area; to create a new ingress/egress to access the jail from the street; and to add new storage areas, shooting range, armory, and office space. This was the first major renovation and addition of space since the facility's occupancy in 1988 and allowed the return of personnel to the main facility who were previously being housed off-site.

The City collects Development Fees on behalf of the Police Department in the amounts of $526.52 per single-family dwelling unit, $710.80 per multi-family dwelling unit, $0.526 per square foot of commercial development, and $0.131 per square foot of industrial development.[4]

---

[2] *City of Fontana. "Development Fees." Last Updated May 7, 2012. www.fontana.org/DocumentView.aspx?DID=2277*

[3] *Fontana Police Department. "2011 Annual Report." Released 2012. www.fontana.org/DocumentView.aspx?DID=2277*

[4] *Ibid.*

(3) Schools

The Etiwanda School District (ESD) and Chaffey Joint Union High School District (CJUHSD) provide educational services to the northern portion of the City of Fontana (including the Specific Plan area) and surrounding unincorporated areas of San Bernardino County. ESD operates a total of 45 schools, including seven elementary schools and four intermediate schools, while CJUHSD operates five high schools. Although the majority of the Specific Plan area is undeveloped, with limited portions of the site occupied by commercial office and retail uses, numerous single-family residential neighborhoods exist in the areas surrounding the project site, which are served by existing schools. Currently, the Specific Plan area is served by the following existing schools:

Etiwanda School District Schools

- **East Heritage Elementary School.** East Heritage Elementary School is located approximately ½-mile south of the project site at 14250 East Constitution Way, Fontana. This school serves any area of the project site bounded by Cherry Avenue, SR-210, San Sevaine Road, and Baseline Avenue.
- **Grapeland Elementary School.** Grapeland Elementary School is located approximately ¾-mile west of the project site at 7171 Etiwanda Avenue, Rancho Cucamonga. This school serves any area of the project site bounded by Baseline Avenue, I-15, and Cherry Avenue.
- **Etiwanda Intermediate School.** Etiwanda Intermediate School is located approximately one-half mile west of the project site at 6925 Etiwanda Avenue, Rancho Cucamonga. This school serves any area of the project site bounded by Baseline Avenue, I-15, and Cherry Avenue.
- **Etiwanda Colony Elementary School.** Etiwanda Colony Elementary School is located over 1.5 miles west of the project site at 13144 Banyan Street, Rancho Cucamonga. This school serves any area of the project site bounded by I-15, SR-210, and Lytle Creek Road.
- **Summit Intermediate School.** Summit Intermediate School is located approximately 1.25-mile west of the Specific Plan boundary at 5959 East Avenue, Rancho Cucamonga. This school serves any area of the project site bounded by I-15, SR-210, and Lytle Creek Road.

Chaffey Joint Union High School District Schools

- **Etiwanda High School.** Etiwanda High School is located approximately ¼-mile west of the Specific Plan boundary at 13500 Victoria Avenue, Rancho Cucamonga. This school currently serves the entire Specific Plan area.

ESD collects Development Fees for school facilities in the amount of $3,068.55 per residential unit (plus $2.82 per square foot of residential development) and $0.35 per square foot of commercial and industrial development.[5] CJUHSD collects Development Fees in the amount of $1.42 per square foot of residential development and $0.15 per square foot of commercial and industrial development.[6]

[5] *Etiwanda School District. "School Developer Fees Effective July 10, 2012." http://www.etiwanda.k12.ca.us/busserv/DeveloperFees.pdf Accessed July 2012.*

[6] *Special District Financing & Administration. "Fee Justification Report for New Residential & Commercial/Industrial Development" prepared for the Chaffey Joint Union High School District. April 2006.*

(4) Parks and Recreation

(a) City of Fontana

The proposed Specific Plan area is served on the local level by the City's Community Services Department and on a regional level by the County's Regional Parks Department. Although there are currently no City parks located within project boundaries, the City's Community Services Department operates thirteen parks situated within one mile of the Specific Plan boundary. These facilities consist of the following:[7]

- **Fontana Park/Jessie Turner Health & Fitness Center –** Fontana Park, which includes the Fontana Park Aquatics Center and Fontana Skate Park, shares a site with the Jessie Turner Health & Fitness Center at 15556 Summit Avenue. Facilities at this location include a hockey rink, playground, pool, restrooms, skate park, picnic tables, basketball courts, fitness room, and trails.
- **Coyote Canyon Park –** Coyote Canyon Park is located at 5065 Coyote Canyon Road and includes barbecue areas, picnic shelters, picnic tables, playground, restrooms, snack bar, and softball fields.
- **Hunter's Ridge Park –** Hunter's Ridge Park is located at 5072 Cherry Avenue and includes barbecue areas, basketball, picnic tables, playground, restrooms, tennis courts, and volleyball courts.
- **San Sevaine Park –** San Sevaine Park is located at 5355 Cherry Avenue and includes barbecue areas, basketball, picnic tables, playground, restrooms, tennis courts, and volleyball courts.
- **Patricia Marrujo Park –** Patricia Marrujo Park is located at 5730 Avenal Place and includes a basketball court, playground, picnic tables, and restrooms.
- **Rosena Park East –** Rosena Park East is located at 15299 Curtis Avenue and includes a bocce ball/horseshoe area, picnic tables, playground, and restrooms.
- **Rosena Park West –** Rosena Park West is located at 15057 Greys Peak and includes a bocce ball/horseshoe area, picnic tables, playground, and restrooms.
- **Ralph M. Lewis Sports Complex** – Ralph M. Lewis Sports Complex is located at 6198 Citrus Avenue and includes a football field, restrooms, snack bar, and soccer field.
- **Koehler Park** – Koehler Park is located at 15352 Beech Avenue and includes ball fields, barbecue areas, basketball, picnic shelters, picnic tables, playground, restrooms, snack bar, soccer field, and tennis courts.
- **Heritage Center & Pool Complex** – Heritage Center & Pool Complex is located at 7350 West Liberty Parkway and includes pool facilities, event space, and restrooms.
- **McDermott Park West/McDermott Sports Complex** – McDermott Park West/McDermott Sports Complex is located at 7846 South Heritage Loop and includes ball fields, barbecue areas, basketball, picnic tables, playground, restrooms, snack bar, soccer field, tennis courts, and volleyball courts.
- **North Heritage Circle Park** – North Heritage Circle Park is located at 1736 North Heritage Circle and includes barbecue areas, basketball, picnic tables, playground, and restrooms.

[7] *City of Fontana Official Website. Community Services Department – Parks & Facilities. http://fontana.org/index.aspx?nid=157. Accessed July 2012.*

- **Heritage Circle Park** –Heritage Circle Park is located at 14332 Caryn Circle and includes barbecue areas, picnic tables, playground, and restrooms.

In addition to the recreational opportunities described above, residents have limited use of school facilities for recreational activities and sports leagues through existing joint-use agreements with various school districts serving the community, including ESD and CJUHSD.

The City currently collects Development Fees in the amount of $796.26 per single-family residential unit, $358.32 per multi-family residential unit, and $0.398 per square foot of commercial and industrial development for various public facility improvements, which may include parks and recreational facilities.[8]

(b) County of San Bernardino

The San Bernardino County County's Regional Parks Department is the overseer for parks and recreation facilities within the County. The largest source of recreational land within the County is publicly-owned open space areas that provide opportunities for outdoor recreation, including water sports, hiking, bicycling, equestrian activities, off-road vehicle activities, camping and fishing. Within more urbanized areas, the County operates regional parks and special district parks. The closest County park facilities to the project site are the Cucamonga-Guasti Regional Park, located approximately 5.5 miles southwest of the Specific Plan area in the City of Ontario, and Glen Helen Regional Park, approximately 4.5 miles to the northeast in the City of San Bernardino. The 150-acre Cucamonga-Guasti Regional Park provides opportunities for fishing, swimming, picnicking, and other related outdoor activities, while the 1,340-acre Glen Helen Regional Park provides two lakes for fishing, a swim complex with pool, sandy area, dual water slides, zero depth water play park, large group shelter picnic areas, the 65,000-seat San Manuel Amphitheater outdoor concert venue, and the Glen Helen Raceway off-highway competitive event facility.

(5) Libraries

The San Bernardino County Library system provides library services to the unincorporated areas of San Bernardino County and several incorporated cities, including the City of Fontana. Through its own resources and through a joint online library in collaboration with the Riverside County Library, Murrieta Public Library, Moreno Valley Public Library, and College of the Desert, the County's collection currently totals more than 2.3 million items, and includes books, magazines, videos, CDs, DVDs, audio books, and e-books. The County's library resources are housed in 30 branch libraries located throughout the County.

The County library facilities located in closest proximity to the project area include the following:

- **Summit Branch Library.** Summit Branch Library is located on the campus of Summit High School, adjacent to the project site boundaries at 15551 Summit Avenue. It is operated jointly by the County and the Fontana Unified School District (FUSD). In addition to thousands of general interest and reference books, the Summit Branch Library provides a diverse collection of complete books on CD-ROM and computers for Internet access.

[8] *City of Fontana. "Development Fees." Last Updated May 7, 2012. www.fontana.org/DocumentView.aspx?DID=2277*

- **Fontana Lewis Library and Technology Center.** The Fontana Lewis Library and Technology Center is located approximately 3.5 miles southeast of the project site at 8437 Sierra Avenue, Fontana. The regional facility is 93,000 square feet in size, located in the downtown civic center and opened on April 19, 2008. The library features a collection exceeding 142,000 items, 203 public use computers, and a 330-seat auditorium for meeting, lectures, and special presentations.

Funding for additional library facilities is provided in part by developer fees imposed on new development. The City collects a Development Fee for library services in the amount of $533.30 per single-family residential unit, $239.99 per multi-family residential unit, and $.042 per square foot of commercial and industrial development.[9]

b. Regulatory Framework

(1) Fire Protection

(a) State of California

The California Code of Regulations (CCR) Title 24 (California Building Code [CBC]) is a compilation of building standards, including fire safety standards for residential and commercial buildings. CBC standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature, not covered by the national model code. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and, the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The CBC applies to all occupancies in California, except where more stringent standards have been adopted by local agencies. Specific CBC regulations have been incorporated by reference in the Fontana Municipal Code (FMC). Chapter 7 of the CBC, regarding the use of fire-resistant building materials, fire suppression systems, and other fire safety elements related to the design and construction of new buildings, and Chapter 9 of the CBC regarding fire protection systems, are incorporated by reference in Chapter 5 (Section 5-61) of the FMC.

Also, the SBCFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, as managed by the Governor's Office of Emergency Services (OES). The OES Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the state into six mutual aid regions to facilitate the coordination of mutual aid. The SBCFD is located in Region VI. Through the Emergency Mutual Aid system, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. All OES Mutual Aid participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

[9] *Ibid.*

(b) Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the General Plan sets goals, objectives, and policies for fire protection and emergency medical services in the City of Fontana. Objectives and policies have been established in order to ensure that every neighborhood has the necessary level of fire protection service, emergency medical service, and infrastructure. Under the General Plan, the City's goal for both fire protection and emergency medical service response time is to maintain the current average of four to five minutes.[10]

(c) Fontana Municipal Code

As noted above, CBC regulations have been incorporated by reference in the Fontana Municipal Code (FMC). Chapter 7 of the CBC, regarding the use of fire-resistant building materials, fire suppression systems, and other fire safety elements related to the design and construction of new buildings, and Chapter 9 of the CBC regarding fire protection systems, are incorporated by reference in Chapter 5 (Section 5-61) of the FMC.

(2) Police Protection

(a) Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the General Plan sets goals, objectives, and policies for police protection services in the City of Fontana. Objectives and policies are provided that establish a service goal of 1.4 officers per 1,000 City residents, achieve 33 percent free time for all sworn police officers, and expand current programs including (1) the area commander program in order to more effectively serve specific areas of the City; (2) the contact stations program to more efficiently serve outlying areas; (3) the school resource officer program on all current and future middle school campuses; (4) the extensive volunteer crime prevention programs, including citizen volunteers, explorers, and citizens on patrol, neighborhood watch, police reserves, and community emergency response team; and (5) the bilingual incentive program in order to more effectively serve the Latino community.

(3) Schools

(a) California Education Code

Educational services for the project are subject to the rules and regulations of the California Education Code and governance of the State Board of Education. The State also provides funding through a combination of sales and income taxes. In addition, pursuant to Proposition 98, the State is also responsible for the allocation of educational funds that are acquired from property taxes. Further, the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities.[11]

[10] *City of Fontana General Plan Public Facilities, Services & Infrastructure Element, page 8-26.*

[11] *California Education Code Section 17620(a)(1).*

(b) Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998 (known as Senate Bill 50), enacted in 1998, is a program for funding school facilities largely based on matching funds. The new construction grant provides funding on a 50/50 State and local match basis. The modernization grant provides funding on a 60/40 basis. Districts that are unable to provide some, or all, of the local match requirement and are able to meet the financial hardship provisions may be eligible for additional State funding.[12]

SB 50 permits school districts to levy a fee, charge, dedication, or other requirement against any development project within its boundaries, for the purpose of funding the construction or reconstruction of school facilities. SB 50 also sets a maximum level of fees a developer may be required to pay. As noted above, ESD collects Development Fees for school facilities in the amount of $3,068.55 per residential unit (plus $2.82 per square foot of residential development) and $0.35 per square foot of commercial and industrial development, while CJUHSD collects fees in the amount of $1.42 per square foot of residential development and $0.15 per square foot of commercial and industrial development. Pursuant to Government Code Section 65995, the payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to a less than significant level. [13]

(4) Parks and Recreation

(a) State of California

Section 66477 of the California Government Code, also known as the Quimby Act, was enacted by the California legislature in 1965 to promote the availability of park and open space areas in response to California's rapid urbanization and the need to preserve open space and provide parks and recreation facilities in response to this urbanization. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land, or the payment of fees for park and/or recreational facilities in lieu thereof, or both, by developers of residential subdivisions as a condition to the approval of a tentative map or parcel map. Under the Quimby Act, dedications of land shall not exceed three acres of parkland per 1,000 persons residing within a subdivision, and in-lieu fee payments shall not exceed the proportionate amount necessary to provide three acres of parkland, unless the amount of existing neighborhood and community parkland exceeds that limit.

(b) Fontana General Plan

The Fontana General Plan Parks, Recreation & Trails Element guides the provision of parks and recreational facilities within the City of Fontana. Aside from establishing goals and policies related to the ongoing need for park facilities for City residents, the Parks, Recreation & Trails Element also describes various park standards and requirements. The General Plan defines the basic park types as follows:

- **Regional Parks –** 40 acres or more with a wide range of amenities to attract the greatest range of users and interests within and beyond the city. Their typical service radius corresponds to a one-hour drive. Fontana's regional park – Martin-Tudor-Jurupa Hills Regional Park - is located near the

[12] *State of California, Office of Public School Construction, An Overview of the State School Facility Programs, February 2010.*

[13] *Calif. Government Code § 65996.*

southern border of the City and features a lagoon, museum, trails, nature center and over 780 acres of open space.

- **Community Parks –** Ten to 40 acres with a service radius of 1.5 miles; typical amenities include pool, lighted sports fields and courts, picnic facilities, play areas, restrooms and off-street parking.
- **Neighborhood Parks –** 1 to 10 acres; walk or bike-to parks which are located within the neighborhood they serve; include both active and passive designs; represent a separate property delineated by a fence and provide amenities determined by the neighborhood, often including picnic areas, informal fields, tot lots, court games, passive green space and off-street parking.
- **Sub Neighborhood Parks –** Typically less than one acre are often called mini-parks, pocket parks or play lots; serve built-up, urbanized areas; often developed in conjunction with Specific Plans.

The General Plan calls for a park acreage standard of three acres of developed park land and two acres of open space per 1,000 residents. This is one acre greater than the land required by the State's Quimby Act, which requires developers to provide land and/or fees for new parks based on a standard of four acres per thousand residents.

The goals and policies contained in the Parks, Recreation & Trails Element serve to ensure that a wide variety of parks and recreation facilities are provided throughout the City, the design of such facilities meets the particular needs of the populations they serve, accessibility and connectivity between facilities is maximized, and opportunities for joint-use agreements are pursued.

In addition to guidance regarding parks and other recreational facilities, the Parks, Recreation & Trails Element also provides standards, goals and policies related to trails within and around the City. The General Plan includes the following trail standards:

- **Equestrian/Hiking Trails –** wide enough to allow two horses to pass; minimum 10-foot wide and 12-foot vertical clearance from overhanging branches.
- **Class 1 Bicycle Trail - Hiking/Biking Trails** – combined trail with improved surface of concrete or asphalt for the bike and an unimproved surface for jogging; minimum width for two bikes is eight feet, five feet for one bike, and four feet for hikers.
- **Class 2 Bikeway -** for use along roadways in urban settings; minimum land width of four feet between the gutter or parking lane and the auto travel lane.
- **Joint-Use Trails –** accommodates joggers, hikers, bicyclists, and equestrians using a separated trail; bikeway is asphalt or concrete (minimum twelve feet for bikers and joggers); the riding/jogging section is separated from the bikeway by a three-foot landscaped median.
- **Class 3 Bicycle Routes –** connect Class 1 and 2 Bikeways; usually used only for a few blocks, often in developed areas.

The goals and policies contained in the Parks, Recreation & Trails Element require the ongoing expansion of existing and construction of additional pedestrian, bicycle, and equestrian facilities; linkages with existing and future trails; connection of commercial areas and public facilities with residential neighborhoods; continued funding for new and expanded facilities, as well as long-term maintenance.

(5) Libraries

(a) Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the General Plan sets goals, objectives, and policies for library services in the City of Fontana. Objectives and policies have been established to ensure that library services are provided in selected convenient locations in outlying sectors of the community, in coordination with school districts for joint use. The General Plan also provides action items for coordination with San Bernardino County in implementing its library strategic plan for locating, funding and diversifying library facilities and services.

3. PROJECT IMPACTS

a. Methodology

(1) Fire Protection

Fire service needs relate to the size of the population and geographic area served, the number and types of calls for service, and the characteristics of the community and the proposed project. Changes in these factors resulting from the proposed project may increase the demand for services. The FFPD/SBCFD evaluates the demand for fire prevention and protection services on a project-by-project basis to review a project's emergency features and to determine if a proposed project would require additional equipment, personnel, new facilities, or alterations to existing facilities. Beyond the standards included in the City's Fire Code, consideration is given to the size of a project, uses proposed, fire flow necessary to accommodate the project, response time (an acceptable response time is generally five minutes), and distance for engine and truck companies, fire hydrant sizing and placement standards, access, and the project's potential to use or store hazardous materials. Based on these factors, a determination is made as to whether the FFPD would require a new or physically altered facility to maintain current service levels, the construction of which could result in a potentially significant environmental impact.

(2) Police Protection

The determination of significance relative to impacts on police protection services is based on the ability of police personnel to adequately serve the existing and future population. Based on these criteria, a determination was made as to whether police facilities could accommodate the additional demand for police protection services resulting from the proposed project without the need for a new facility or the alteration of existing facilities.

(3) Schools

The analysis of enrollment effects on schools is based in part on the ability of ESD and CJUHSD school facilities to accommodate the potential increase in students generated from development of the project. The analysis estimates the number of students that would be generated by the proposed project using ESD and CJUHSD student generation rates, and focuses on whether ESD and CJUHSD school facilities expected to serve the project would have sufficient available capacity to accommodate these students. The analysis addresses all levels of education facilities operated by ESD and CJUHSD (i.e., elementary, middle, and high schools); and focuses on the schools that would serve the project site. It also addresses state regulations, i.e. SB 50, and related development fees as a mechanism for providing new school facilities and addressing school impacts of the proposed project.

(4) Parks and Recreation

The analysis of parks and recreation impacts is based on comparing the park and open space ratio associated with the project to the standards set forth by the Quimby Act and the Fontana General Plan. To be consistent with the standards set forth in the aforementioned regulatory guidance documents, the analysis of impacts is based on the acreage of parks and open space available per the project's estimated residential population.

(5) Libraries

Potential project impacts on library services and facilities are determined based on identifying the primary service library or libraries that serve the project site, forecasting the number of residents generated by the project, identifying the population within the library's service area at the time of project buildout, combining the project's resident population with the forecasted service area population, and comparing the combined population to the service population for the library as determined by SBCL.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including public services. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to public services would occur if the project would result in the following:

Threshold 1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire Protection (refer to Impact Statement 4.M-1 below);
- Police Protection (refer to Impact Statement 4.M-2 below);
- Schools (refer to Impact Statement 4.M-3 below);
- Parks (refer to Impact Statement 4.M-4 below);
- Other public facilities (refer to Impact Statement 4.M-5 below).

Threshold 2: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (refer to Impact Statement 4.M-4 below); or

Threshold 3: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (refer to Impact Statement 4.M-4 below).

c. Project Design Features

Future development pursuant to the proposed Specific Plan would comply with applicable State and local codes and building requirements related to fire safety and access for emergency vehicles in order to provide an adequate degree of fire protection through proper design and allow for acceptable response times for fire

and emergency medical services. Water infrastructure within the Specific Plan area would also be constructed as necessary to meet the minimum fire flow requirements of the SBCFD/FFPD. The proposed Specific Plan also includes development standards that require street lighting, roadway improvements, and enhanced site design requirements to improve public safety and minimize the need for additional police protection services. Furthermore, the proposed project includes three school sites within the land use plan that would provide for future on-site school facilities to meet the educational demands of proposed uses and the surrounding community. Similarly, the proposed Specific Plan includes a wide range of public and private parks, trails, and other recreational features that would serve on- and off-site users, as appropriate. Proposed public and private parks are illustrated in Figure 2-14, *Public and Private Parks*, while proposed bicycle, trail, and pedestrian facilities are shown in Figure 2-15, *Bikeways and Trails Plan*, in Chapter 2, *Project Description*, of this Draft EIR.

d. Analysis of Project Impacts

(1) Fire Protection

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Fire Protection?

Impact 4.M-1 *Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, or the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. This impact is considered less than significant with mitigation incorporated.*

(a) Fire Protection Services and Facilities

The proposed project provides for a comprehensive update of land uses, regulations, and development standards within site boundaries. Future development occurring under the Specific Plan may create impacts on fire and emergency medical services.

Three FFPD/SBCFD stations are located within the project site vicinity. Fire Station 79 is located at 5075 Coyote Canyon Road in the City of Fontana, approximately 800 feet north of the northernmost end of the Specific Plan boundary across the I-15 freeway; Fire Station 78 is located at 7110 Citrus Avenue in the City of Fontana, approximately 1.5 miles east of the Specific Plan boundary; and Fire Station 73 is located at 14360 Arrow Boulevard in the City of Fontana, approximately 1.5 miles south of the Specific Plan's southern boundary. However, FFPD is currently in the process of relocating Fire Station 73 (which was built in 1959) from its current location to a new location at the intersection of Foothill Boulevard and Banana Avenue, at which a new fire station that meets current design standards and is sized to meet future demands would be constructed. The new Fire Station 73, which is being carried out by FFPD as a separate project with its own environmental review pursuant to CEQA, is intended to improve service capabilities and response times to

the northern portion of the City's Western Sphere, which includes the project site. Although the construction of the new Fire Station 73 facility is not necessary to serve future development pursuant to the proposed Specific Plan, the new fire station would provide more modernized facilities and equipment, as well as firefighting and emergency medical personnel, in closer proximity to the project site than under existing conditions. As such, although not required to meet project-related demands, the relocated Fire Station 73 would enhance the ability of FFPD/SBCFD to provide fire protection and emergency medical services within the project boundaries in the long-term. The proposed project would not require the provision of new or physically altered fire protection facilities, and therefore project-related impacts to fire protection facilities would be less than significant.

To further ensure that the provision of fire protection and emergency services is not eroded by future development, all development projects proposed within the Specific Plan area would be required to pay the City's Development Fee for fire facilities ($164.00 per residential dwelling unit, $0.25 per square foot of commercial development, and $0.10 per square foot of industrial development). These fees would be utilized to fund additional services and improvements that may be determined to be required to provide adequate fire protection to the Specific Plan area. Although such fees may be utilized to fund the construction or expansion of additional fire protection facilities to serve future development, the nature and location of such facilities is not known at this time, and as such evaluation of the environmental impacts associated with the construction and operation of these facilities is not currently possible. However, as is the case for future development within the Specific Plan area, individual projects (including public facilities) would be subject to future environmental review, as determined necessary and appropriate by the City, in order to evaluate the specific impacts at a level of detail not possible in this Draft EIR. Furthermore, a number of mitigation measures related to fire protection services contained in the 2003 General Plan Environmental Impact Report are applicable to the proposed project and would be implemented, as necessary, to further reduce project-related impacts. As such, upon implementation of recommended mitigation measures and the payment of applicable developer fees for fire facilities, and given the relocation of Fire Station 73, impacts related to fire protection services and facilities would be less than significant.

(b) Fire Flow

Fire flow requirements are closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard. The following fire flow demand (FFD) requirements for each proposed land use type are provided by the California Fire Code:

Land Use Designation	Description	Fire Flow Demand (Gallons per Minute [GPM])
R - 1 (0-5 du/ac)	Single Family Detached	1,500 GPM
R - 2 (5-12 du/ac)	Single Family Detached	1,500 GPM
R - 3a (12-18 du/ac)	Condominiums	2,500 GPM
R - 3b (18-24 du/ac)	Condominiums	2,500 GPM
R - 4 (24-50 du/ac)	Apartments	2,500 GPM
C	Commercial Retail	4,000 GPM
MU-1	Mixed Use-1	4,000 GPM
MU-2	Mixed Use-2	4,000 GPM
MU-3	Mixed Use-3	4,000 GPM
OS / P1	Open Space / Public Parks	N/A
OS / P2	Open Space / Private Parks	N/A

Land Use Designation	Description	Fire Flow Demand (Gallons per Minute [GPM])
OS / L	Open Space / Landscape	N/A
OS / UC	Open Space / Utility Corridor	N/A
OS/DC	Open Space / Drainage Corridor	N/A
ES	Elementary School	4,000 GPM
HS	High School	4,000 GPM

Source: Hall & Foreman, Inc. "Westgate Specific Plan Infrastructure Study." January 2011 (refer to Appendix L of this Draft EIR)

Future development of on-site uses would be required to provide fire flow for the various land use types per California Fire Code standards. The two water purveyors serving the Specific Plan area, Cucamonga Valley Water District (CVWD) and Fontana Water Company (FWC), have both indicated that adequate water supplies are available to serve future on-site uses (per project-specific Water Supply Assessments included in Appendix K of this Draft EIR), and water distribution infrastructure would be constructed or extended, as needed, to meet future project-related demands. However, since no specific development projects are currently proposed, and therefore no detailed engineering plans currently exist, additional City and/or FFPD/SBCFD review of project engineering plans would be necessary to ensure that adequate fire flows are achieved. As such, with City and/or FFPD/SBCFD plan review to ensure that adequate water pressure would be provided, impacts related to fire flow would be less than significant.

(2) Police Protection

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Police Protection?

Impact 4.M-2 *Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. This impact is considered less than significant with mitigation incorporated.*

The proposed project provides for a comprehensive update of land uses, regulations, and development standards within site boundaries. Future development occurring under the Specific Plan may create impacts on law enforcement services.

The City of Fontana Police Department's nearest staffed facility to the project site is a Contact Station within the Summit Heights Gateway shopping center, immediately adjacent to and north of the proposed Westgate Center Village and south of the proposed Falcon Ridge Village. Police also currently respond to the area from

the police headquarters adjacent to City Hall, approximately three miles southeast of the Specific Plan boundary Public safety improvements, such as street lighting, roadway improvements, and enhanced site design requirements would be implemented as part of the proposed Specific Plan, and it is unlikely that any individual future project, or even buildout of the entire Specific Plan, would result in the need to construct new police facilities. In addition, each project applicant for future development projects would be required to pay developer fees that would ensure that adequate law enforcement services exist in the project area. The City collects Development Fees on behalf of the Police Department in the amounts of $526.52 per single-family dwelling unit, $710.80 per multi-family dwelling unit, $0.526 per square foot of commercial development, and $0.131 per square foot of industrial development. These fees would be utilized to fund additional services and improvements that may be determined to be required to provide adequate police protection to the Specific Plan area. Although such fees may be utilized to fund the construction or expansion of additional police protection facilities to serve future development, the nature and location of such facilities is not known at this time, and as such evaluation of the environmental impacts associated with the construction and operation of these facilities is not currently possible. However, as is the case for future development within the Specific Plan area, individual projects (including public facilities) would be subject to future environmental review, as determined necessary and appropriate by the City, in order to evaluate the specific impacts at a level of detail not possible in this Draft EIR. As noted above for fire protection services, a number of mitigation measures related to police protection services contained in the 2003 General Plan Environmental Impact Report are applicable to the proposed project and would be implemented, as necessary, to reduce project-related impacts. Upon implementation of recommended mitigation measures and payment of developer fees, impacts related to police projection would be less than significant.

(3) Schools

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Schools?

Impact 4.M-3 *Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. This impact is considered less than significant with mitigation incorporated.*

Future residential uses pursuant to the Specific Plan would directly generate population growth and associated demands for public education for school-aged children living on-site. Additionally, office, retail, and light industrial development allowable under the Specific Plan would create substantial employment opportunities within the project area, which could lead to indirect population increases within the City and an associated increase in demand for educational services and facilities. However, the proposed Specific Plan includes three school sites within the project boundaries, including two elementary schools and one high school. While existing schools in the project area could accommodate short-term incremental increases

in student populations, long-term demand for additional school facilities would be met by future development of on-site school campuses, as deemed necessary by ESD and CJUHSD, respectively. As noted previously, ESD collects Development Fees for school facilities in the amount of $3,068.55 per residential unit (plus $2.82 per square foot of residential development) and $0.35 per square foot of commercial and industrial development, while CJUHSD collects Development Fees in the amount of $1.42 per square foot of residential development and $0.15 per square foot of commercial and industrial development. The school impact fees, as set forth in Government Code section 65996, constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of the Specific Plan. The provisions are "deemed to provide full and complete school facilities mitigation." Gov't. Code §65996(b). Because the statute states that the statutory fees are the exclusive means of considering as well as mitigating school impacts, it limits not only the mitigation that may be required, but also the scope of impact review in the EIR and the findings for school impacts. See *Chawanakee Unified Sch. Dist. v County of Madera* (2011) 196 Cal.App, 4th 1016, 126 CR3d 859, in which the court held that because the methods in the statute are the exclusive means of "considering" impacts on schools, an EIR need not describe and analyze a development's impacts on schools. Additionally, mitigation measures contained in the 2003 General Plan EIR would be applicable to the proposed project and would be implemented, as appropriate, to ensure that school-related impacts are less than significant. Accordingly, with implementation of applicable mitigation measures and payment of Development Fees, the proposed project's impact on public school facilities would be less than significant.

(4) Parks and Recreation

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Parks?
Threshold	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Threshold	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact 4.M-4 *Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives parks and recreational facilities. Further, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and the proposed project does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. This impact is considered less than significant with mitigation incorporated.*

The proposed project provides for a comprehensive update of land uses, regulations, and development standards within site boundaries. Future residential uses pursuant to the Specific Plan would directly generate population growth and associated demands for parks and recreational facilities for people living on-site. Additionally, office, retail, and light industrial development allowable under the Specific Plan would create substantial employment opportunities within the project area, which could lead to indirect population increases within the City and an associated increase in demand for parks and recreational facilities.

The proposed Specific Plan area is served on a local level by the City's Community Services and Recreation Department and on a regional level by the County's Regional Parks Department. Although there are currently no City parks located within project boundaries, the proposed project includes an extensive network of public and private parks, open space, trails, and various pedestrian and bicycle facilities. Specifically, the proposed Specific Plan includes ten Planning Areas totaling 47.8 acres designated for public parks (OS/P1) and 14 Planning Areas totaling 9.15 acres designated for private parks (OS/P2). In addition to these on-site recreational facilities, residents would also have limited use of school-related recreational facilities and sports leagues through existing joint-use agreements with ESD and CJUHSD, and potential future agreements for on-site school facilities. Public parks would include both active and passive uses such as ball fields, tennis courts, basketball courts, tot lots, exercise courses, picnic stations, and barbeque areas. All public park Planning Areas are located within a five- to seven-minute walk of the residential areas which they serve. All public parks, including the three school sites within the Specific Plan, would be interconnected by Class I and Class II bike lanes. Private parks and recreation areas would generally be located within a three- to five-minute walk of the residential areas they serve and typically include pools, spas, and play areas. They would be complemented in higher density residential areas with tot lots or barbeque areas to be located within 800 feet of any dwelling unit, which equates to approximately a three-minute walk.

The City currently collects Development Fees to fund new and expanded public facilities, including parks and recreational facilities, in the amount of $796.26 per single-family residential unit, $358.32 per multi-family residential unit, and $0.398 per square foot of commercial and industrial development. These fees would be utilized to fund additional services and improvements that may be determined to be required to provide adequate parks and recreational facilities to serve the Specific Plan area. Although such fees may be utilized to fund the construction or expansion of additional parks and recreational facilities to serve future development, the nature and location of such facilities is not known at this time, and as such evaluation of the environmental impacts associated with the construction and operation of these facilities is not currently possible. However, as is the case for future development within the Specific Plan area, individual projects (including parks and recreational facilities) would be subject to future environmental review, as determined necessary and appropriate by the City, in order to evaluate the specific impacts at a level of detail not possible in this Draft EIR. Additionally, mitigation measures included in the 2003 General Plan EIR would be applicable to the proposed project and would be implemented, as appropriate, to ensure that impacts are minimized. As such, with implementation of applicable mitigation measures and payment of required Development Fees to support City public facilities, impacts related to parks and recreation would be less than significant.

(5) Libraries

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: - Other public facilities?

Impact 4.M-5 *Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services. This impact is considered less than significant.*

Future residential uses pursuant to the Specific Plan would directly generate population growth and associated demands for library services and facilities for people living on-site. Additionally, office, retail, and light industrial development allowable under the Specific Plan would create substantial employment opportunities within the project area, which could lead to indirect population increases within the City and an associated increase in demand for library services and facilities. As stated above, there are two San Bernardino County Library facilities in the site vicinity that serve the project area: Summit Branch Library, located on the campus of Summit High School, adjacent to the project site boundaries at 15551 Summit Avenue, and Fontana Lewis Library and Technology Center, located approximately 3.5 miles southeast of the project site at 8437 Sierra Avenue. The City collects a Development Fee for library services in the amount of $533.30 per single-family residential unit, $239.99 per multi-family residential unit, and $.042 per square foot of commercial and industrial development. These fees would be utilized to fund additional services and improvements that may be determined to be required to provide adequate library services to the Specific Plan area. Although such fees may be utilized to fund the construction or expansion of additional library facilities to serve future development, the nature and location of such facilities is not known at this time, and as such evaluation of the environmental impacts associated with the construction and operation of these facilities is not currently possible. However, as is the case for future development within the Specific Plan area, individual projects (including public facilities) would be subject to future environmental review, as determined necessary and appropriate by the City, in order to evaluate the specific impacts at a level of detail not possible in this Draft EIR. In addition, mitigation measures included in the 2003 General Plan EIR would be applicable to the proposed project and would be implemented, as appropriate, to ensure that impacts are minimized. Thus, upon payment required fees and implementation of applicable mitigation, impacts regarding library services and facilities would be less than significant.

(6) Consistency With Regulatory Framework

(a) California Fire Code

As noted previously, specific CBC regulations have been incorporated by reference in the Fontana Municipal Code (FMC). Chapter 7 of the CBC, regarding the use of fire-resistant building materials, fire suppression systems, and other fire safety elements related to the design and construction of new buildings, and Chapter 9 of the CBC regarding fire protection systems, are incorporated by reference in Chapter 5 (Section 5-61) of the FMC. As these regulations for fire safety have been incorporated into the City's building code, and would

therefore their provisions would be incorporated into future developments on-site, the proposed project would be consistent with the California Fire Code and impacts would be less than significant.

(b) California Education Code and Senate Bill 50

The proposed project would be subject to the requirements of the California Education Code and Senate Bill 50 regarding the provision and funding of necessary school facilities within school district boundaries. As the proposed project would pay requisite fees for all future development projects on-site, it would not conflict with the California Education Code or Senate Bill 50 and impacts would be less than significant.

(c) Quimby Act

The proposed project would provide on-site parks, open space, and other recreational facilities to meet the demands of on-site uses. Furthermore, future development projects would be required to pay Development Fees to fund public facilities within the City, which at the discretion of the City of Fontana, can include park facilities. As such, the proposed project would be consistent with the Quimby Act and impacts would be less than significant in this regard.

(d) Fontana General Plan

The City's General Plan contains a number of goals and policies that are relevant to public services, including goals and policies contained in the Open Space & Conservation Element, the Public Facilities, Services & Infrastructure Element, and the Parks, Recreation & Trails Element. As discussed below in **Table 4.M-1**, *General Plan Consistency Analysis*, the proposed Specific Plan would not conflict with the applicable goals and policies of the Fontana General Plan. As such, impacts would be less than significant.

Table 4.M-1

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Open Space & Conservation Element	
Goal 1.1: Preserve Natural Open Space in the San Gabriel Mountains and Jurupa Hills.	
Policy 1.1-1: Support preservation of the open space along the San Gabriel Mountains and Jurupa Hills for natural habitat, scientific inquiry, passive recreation and scenic values.	**Consistent.** No portion of the proposed Specific Plan area is located within or adjacent to the San Gabriel Mountains or Jurupa Hills, and therefore the proposed project would not limit the preservation of open space in these areas.
Policy 1.1-2: Cooperate with and facilitate efforts to place natural open space in public or quasi ownership, under the management of a public or quasi-public agency or a non-profit conservancy.	**Consistent.** No portion of the project site is characterized by natural open space, as the entire site has been previously disturbed through historic agricultural activities. As such, no opportunities exist on-site for the placement of natural open space into public ownership.

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 1.1-3: Maintain open space buffers between the San Gabriel and Jurupa Mountains and any form of development, including streets and highways, where feasible.	**Consistent.** The project area is not located in close proximity to the San Gabriel Mountains or Jurupa Hills such that open space buffers for on-site development are warranted.
Goal 2.1: Provide public access to and allow joint recreational use of utility corridors, wherever feasible.	
Policy 2.1-1: Link multi-use utility corridors to other elements of the local and regional parks and trails systems wherever feasible.	**Consistent.** The proposed project includes trail connections and appropriate recreational features along the on-site SCE utility corridor, subject to review and approval by SCE and other affected utility agencies that utilize the corridor.
Goal 2.2: Expand the open space and conservation system, where feasible, to include private and public lands that offer multi-use open space and cultural resource opportunities.	
Policy 2.2-1: Evaluate opportunities for mixed-uses of private and public open space and utility rights-of-way and incorporate such mixed uses into the approved plan as part of the new development and public infrastructure planning process.	**Consistent.** The proposed Specific Plan includes a network of public and private parks, open space areas, and related facilities within the on-site utility corridor, which would be connected by a system of trails and other pedestrian and bicycle facilities.
Public Facilities, Services & Infrastructure Element	
Goal #1: High quality schools with adequate physical capacity are provided in all areas of our City.	
Policy 1-1: Planning and development in the City shall continue to be integrated with the needs of school districts for new facilities.	**Consistent.** The proposed Specific Plan includes three school sites that would be developed by ESD and CJUHSD, respectively, as necessary to meet the future demands of the Districts.
Policy 1-2: Local school districts shall continue to be supported in their efforts to obtain additional funding sources, including special assessment districts and supplementary state and federal funding.	**Consistent.** Future development on-site would be required to pay ESD and CJUHSD Development Fees in order to offset the demand for classroom seats generated by each project.
Policy 1-3: Effective joint use agreements shall continue to be established and maintained with school districts serving the community to achieve optimum, cost effective use of school facilities.	**Consistent.** As is the case with existing school facilities in the City, it is anticipated that ESD and CJUHSD will continue to provide opportunities for joint-use facilities at the proposed on-site school campuses.
Policy 1-4: Building permits shall continue to be withheld until verification that applicable school fees have been collected by the appropriate school district.	**Consistent.** As required by the City, building permits for future on-site development projects would be withheld until verification that applicable school fees have been collected by the appropriate school district.

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 1-5: Collaboration with school districts should occur in designing adjacent school/recreation facilities to achieve maximum usability and cost effectiveness for both the City and the school districts.	**Consistent.** As part of the planning process for the proposed Specific Plan, both ESD and CJUHSD were consulted and are collaborating with the project applicant for future development of school campuses within the designated Planning Areas on-site.
Policy 1-6: Collaboration with school districts should occur in expanding educational opportunities and programs that benefit from City facilities.	**Not Applicable.** The City's collaboration with area school districts would not be affected by the implementation of the proposed project, as the Specific Plan does not include any City facilities.
Goal #2: Our law enforcement and fire protection services meet our population's public safety needs and contribute to a sense of safety and high quality of life in our community.	
Policy 2-1: Continue to work towards a ratio of 1.4 sworn police officers per 1,000 residents in the City.	**Consistent.** Future development projects on-site would be required to pay Development Fees to the City in order to help achieve service ratio goals.
Policy 2-2: Continue to achieve 33% free time for police patrol officers.	**Consistent.** While the development of on-site uses would have direct effect on free time for patrol officers, payment of fees for future projects would support funding for the provision of adequate police staffing to allow the City to meet this goal.
Policy 2-3: The FPD's area commander program shall continue to be expanded in order to more effectively serve specific areas of the City.	**Consistent.** While the development of on-site uses would have direct effect on expansion of the area commander program, payment of fees for future projects would support funding for the provision of adequate police facilities to allow the City to meet this goal.
Policy 2-4: The FPD's contact stations program shall be expanded to more efficiently serve outlying areas.	**Consistent.** While the development of on-site uses would have no direct effect on expansion of the contact stations program, payment of fees for future projects would support funding for the provision of adequate police facilities to allow the City to meet this goal.
Policy 2-5: The FPD's school resource officer program shall be continued on all current and future middle school campuses.	**Consistent.** While the development of on-site uses would have no direct effect on continuation of the school resource officer program, payment of fees for future projects would support funding for the provision of adequate police facilities and staffing to allow the City to meet this goal.
Policy 2-6: The FPD's extensive volunteer crime prevention programs, including citizen volunteers, explorers, and citizens on patrol, neighborhood watch, police reserves, and community emergency response team shall be continued.	**Consistent.** While the development of on-site uses would have no direct effect on continuation of these FPD programs, payment of fees for future projects would support funding for the provision of adequate police facilities and staffing to allow the City to meet this goal.

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 2-7: The FPD's bilingual incentive program should be continued in order to more effectively serve the Latino community.	**Consistent.** While the development of on-site uses would have no direct effect on continuation of the bilingual incentive program, payment of fees for future projects would support funding for the provision of adequate police facilities and staffing to allow the City to meet this goal.
Policy 2-8: Adequate fire and police response times shall be maintained in the City.	**Consistent.** Future development projects on-site would be required to pay Development Fees to the City in order to maintain acceptable response times.
Policy 2-9: An "ISO" fire rating of class 3 shall continue to be maintained in the City.	**Consistent.** Payment of fees for future projects would support funding for the provision of adequate fire protection facilities and staffing to allow the City to meet this goal.
Policy 2-10: Ensure that new fire stations shall be built in areas of new development so that response times are not eroded.	**Consistent.** Future development projects on-site would be required to pay Development Fees to the City in order to ensure provision of adequate fire facilities and staffing such that response times are maintained.
Goal #3: Our new civic center campus, along with the new Fontana library, fulfills its vision as a multi-use community focal point, providing civic, educational, entertainment and cultural uses.	
Policy 3-1: The public uses and quality of the civic center campus should seek to be strengthened, as this are becomes a major focal point for the community.	**Not Applicable.** This policy refers to the Civic Center in the Downtown area of the City and not the project area.
Policy 3-2: A new library in the civic center shall be maintained in such a way that it functions as a key educational center and community gathering place.	**Not Applicable.** This policy refers to the Civic Center in the Downtown area of the City and not the project area.
Policy 3-3: Library services should be provided in selected convenient locations in outlying sectors of the community, in coordination with school districts for joint use.	**Consistent.** Future development projects on-site would be required to pay Development Fees to the City in order to ensure provision of adequate library facilities to meet growing demands throughout the area and would be coordinated, as appropriate, with ESD and CJUHSD for joint use opportunities.
Policy 3-4: A basic level of facility support for community arts performances should be maintained.	**Not Applicable.** The proposed project would have no effect on the City's level of support for community arts performances.
Parks, Recreation & Trails Element	
Goal #1: There is extensive use of non-motorized transportation, such as bicycles, equestrian, and pedestrian activity, throughout our City for recreation, access to community facilities, and even local commuting.	

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 1-1: The City's bikeways and trails network shall be phased as an integrated system that provides access to community facilities, commercial areas and the regional multi-use trail system.	**Consistent.** The proposed Specific Plan includes an extensive network of trails and other pedestrian- and bicycle-friendly facilities that interconnect with the City's non-motorized transportation network and other regional facilities including the Pacific Electric Inland Empire Trail that abuts the southern project boundary.
Policy 1-2: All new developments on designated routes shall provide bicycle and pedestrian routes linked to adjacent facilities.	**Consistent.** The proposed Specific Plan includes an extensive network of trails and other pedestrian- and bicycle-friendly facilities that interconnect with the City's non-motorized transportation network and other regional facilities including the Pacific Electric Inland Empire Trail that abuts the southern project boundary.
Policy 1-3: Routes accessible for disabled persons shall be provided that link public facilities and commercial areas to residential neighborhoods.	**Consistent.** The proposed Specific Plan includes an extensive network of trails and other pedestrian- and bicycle-friendly facilities that are handicapped-accessible and interconnect with existing and proposed residential and commercial uses.
Policy 1-4: Adequate and secure bicycle storage facilities shall be provided for new institutional and non-residential development.	**Consistent.** To the extent required by the City, future institutional and non-residential development on-site would provide bicycle storage facilities.
Policy 1-5: Bicycle racks shall be provided in all public facilities and in activity centers.	**Consistent.** Future on-site development would provide bicycle racks, including at a minimum, future public facilities (schools) and activity centers (commercial uses and parks/recreational uses).
Goal #2: Bicycle and trail systems are connected to neighboring city facilities and to the regional network of trails and bikeways.	
Policy 2-1: The City shall complete the planning for its portion of the regional network of trails and bikeways.	**Consistent.** While the responsibility for planning its portion of the regional trail network lies with the City, the proposed Specific Plan is supportive of planning and implementation of future trail facilities and connections to the regional system within the project boundaries through the provision of the proposed on-site trail network.
Policy 2-2: The planning of bikeways and trail systems shall continue to be conducted in coordination with neighboring cities and the County of San Bernardino.	**Consistent.** While the responsibility for coordination with other jurisdictions in planning bikeways and trail systems lies with the City, the proposed Specific Plan is supportive of this effort through the provision of the proposed on-site trail network.

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 2-3: Trail design should incorporate opportunities for scenic views and access to open space.	**Consistent.** On-site trails are primarily located along roadway corridors and the SCE utility corridor, thereby affording scenic views of the San Gabriel Mountains to the north, San Bernardino Mountains to the east, and to a lesser extent the Jurupa Hills to the south. Further, on-site trails would provide convenient direct access to on-site open space areas and parks, as well as off-site facilities.
Goal #3: Proper design, development and maintenance standards for bikeways and trails are used for all trails and bikeways within our City.	
Policy 3-1: Contemporary design standards for the various classes of bikeways as well as trails shall be incorporated into the City's Parks, Recreation and Trails Master Plan and the Circulation Element of the General Plan.	**Consistent.** While the responsibility for developing design standards lies with the City, the proposed facilities in the Specific Plan would be consistent with the City's design guidelines.
Policy 3-2: The City Logo shall be placed at key entry points to and along the bicycle and trail system.	**Consistent.** As deemed appropriate by the City, the City's logo would be placed at key entry points of public parks or other facilities on-site.
Policy 3-3: Installation and/or replacement of the bikeway and trail system should be carried out as part of the City's Capital Improvement Plan.	**Consistent.** The proposed project would provide for the future development of additional bikeway and trail system components within the Specific Plan boundaries.
Policy 3-4: Maintenance funding strategies should be secured prior to construction of new facilities.	**Consistent.** While the responsibility for securing funding strategies for public uses lies with the City, the proposed facilities in the Specific Plan would be funded by future development on-site through payment of Development Fees.
Goal #4: Our City's bikeways and trails are uniformly safe and accessible.	
Policy 4-1: Separation of the bikeway and trail system from traffic and roadways should be established wherever possible.	**Consistent.** The proposed Specific Plan provides a number of off-street trail and other pedestrian and bicycle facilities that are physically separated from vehicular traffic and roadways.
Policy 4-2: Multi-use trails shall provide clear separation of hikers, joggers, and equestrians.	**Consistent.** To the extent required by the City, multi-use trails within the Specific Plan area would provide clear separation of hikers, joggers, and equestrians.
Policy 4-3: Safety features for cyclists and pedestrians, such as separated grades, lighting, buffers, bollards, and landscaping should be used wherever necessary.	**Consistent.** Wherever deemed necessary by the City, safety features for cyclists and pedestrians, such as separated grades, lighting, buffers, bollards, and landscaping would be used as part of future development on-site.
Goal #5: Our system of bikeways and trails is benefited by efficient use of utility easements, flood-control easements and railroad rights-of-way.	

Table 4.M-1 (Continued)

General Plan Consistency Analysis

Goal/Policy	Project Consistency Statement
Policy 5-1: The City should seek use of easements and rights-of-way from owners for use in the bike and trail network.	**Not Applicable.** The proposed Specific Plan would have no effect on the City's efforts to use easements and rights-of-way from owners for use in the bike and trail network.
Policy 5-2: The City shall coordinate with neighboring municipalities and the County for the planning, acquisition and development of an expanded bikeway and trail system.	**Not Applicable.** The proposed Specific Plan would have no effect on the City's efforts to coordinate with neighboring municipalities and the County for the planning, acquisition and development of an expanded bikeway and trail system.
Goal #6: Improvements to our parks and trails system are funded as a regular component of our capital improvement program along with a variety of sources both within and outside of the City.	
Policy 6-1: The City shall continue to fund parks operation and maintenance through the General Fund.	**Consistent.** While the responsibility for funding of parks operation and maintenance is solely that of the City, future uses on-site would be required to pay property taxes and would generate sales taxes that would contribute to the General Fund.
Policy 6-2: The City should to continue to keep park and recreation user fees to a minimum.	**Not Applicable.** The proposed Specific Plan would have no effect on the City's efforts to minimize park user fees.
Policy 6-3: The City should coordinate its planning and funding efforts for facilities of regional interest, such as multi-use trails and regional parks, with the County and other appropriate agencies.	**Not Applicable.** The proposed Specific Plan would have no effect on the City's efforts to coordinate its planning and funding efforts for facilities of regional interest, such as multi-use trails and regional parks, with the County and other appropriate agencies.
Policy 6-4: The City should continue to negotiate agreements for the use of utility easements, flood controls channels, and railroad rights-of-way to expand its park and trail system.	**Not Applicable.** The proposed Specific Plan would have no effect on the City's efforts to negotiate agreements for the use of utility easements, flood controls channels, and railroad rights-of-way to expand its park and trail system.
Policy 6-5: The City shall not construct facilities without funding resources for long-term maintenance and replacement costs.	**Consistent.** While the responsibility for funding long-term maintenance and replacement costs for City facilities is solely that of the City, future uses on-site would be required to pay property taxes and would generate sales taxes that would contribute to the upkeep and operation of such uses.

(e) Fontana Municipal Code

Future development of on-site uses would be subject to all applicable requirement of the FMC, including those related to fire safety, lighting, and emergency vehicle access, which are intended to minimize demands on fire, emergency medical, and law enforcement services within the City. As the proposed project would

comply with applicable provisions of the FMC, impacts would be less than significant with regard to public services.

4. CUMULATIVE IMPACTS

As discussed in Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR, the geographic context for the analysis of cumulative public services impacts is the jurisdiction or service area of each respective agency providing such services. Additionally, four related projects have been considered regarding cumulative development, as also discussed in Chapter 3, all of which are other Specific Plans located within the northern portion of the City of Fontana.

The proposed project and related projects in the City would cumulatively contribute to an increased demand for fire, police, schools, parks/recreation, and library facilities. The cumulative development anticipated in the northern portion of the City would add to demand for such services through the introduction of new land uses. The City's Development Fee program is intended to fund incremental improvements to public services and facilities in order to accommodate new demand. These Development Fees would apply to the proposed project and to the identified cumulative development, and would be utilized for development of expanded service and utility facilities. These fees would be utilized to fund additional services and improvements that may be determined to be required to provide adequate public services to the Specific Plan area. Although such fees may be utilized to fund the construction or expansion of additional public facilities to serve future development, the nature and location of such facilities is not known at this time, and as such evaluation of the environmental impacts associated with the construction and operation of these facilities is not currently possible. However, as is the case for future development within the Specific Plan area, individual projects (including public facilities within and outside the Specific Plan area) would be subject to future environmental review, as determined necessary and appropriate by the City, in order to evaluate the specific impacts at a level of detail not possible in this Draft EIR. Furthermore, various mitigation measures included in the 2003 General Plan EIR would also be applicable to the identified related projects, since they are also located within the City of Fontana, and therefore these mitigation measures would be implemented as necessary to address cumulative public services impacts. As such, with implementation of applicable mitigation measures and payment of requisite fees pursuant to the City's Developer Fee program, cumulative impacts would be less than significant and the project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

Implementation of the following mitigation measures provided in the City's 2003 General Plan EIR (GP EIR) are applicable to the proposed Specific Plan and would be implemented, as necessary, to ensure that impacts related to public services are less than significant.

a. Fire Protection

Mitigation Measure M-1: The City shall maintain an average fire response time of 4 to 5 minutes. [GP EIR MM FS-1]

Mitigation Measure M-2: The City shall continue to maintain an ISO fire rating of Class 3. [GP EIR MM FS-2]

Mitigation Measure M-3: The City shall ensure that new fire stations are built in areas of new development so that response times are not eroded. [GP EIR MM FS-3]

b. Police Protection

Mitigation Measure M-4: The City shall continue to work towards a ratio of 1.4 sworn officers per 1,000 residents. [GP EIR MM P-1]

Mitigation Measure M-5: The Fontana Police Department shall continue to expand its Area Commander Program to more effectively serve specific areas of the City. [GP EIR MM P-2]

Mitigation Measure M-6: The Fontana Police Department shall expand its Contact Stations to more effectively serve outlying areas. [GP EIR MM P-3]

Mitigation Measure M-7: The Fontana Police Department shall continue its School Resource Officer Program on all current and future middle school campuses. [GP EIR MM P-4]

Mitigation Measure M-8: The Fontana Police Department shall continue its extensive volunteer crime prevention programs, including Citizen Volunteers, Explorers, Citizens on Patrol, Neighborhood Watch, Police Reserves, and Community Emergency. [GP EIR MM P-5]

Mitigation Measure M-9: The Fontana Police Department shall continue its bilingual incentive program to more effectively serve the Latino community. [GP EIR MM P-6]

Mitigation Measure M-10: The City shall maintain an average police and fire response time of 4 to 5 minutes. [GP EIR MM P-7]

Mitigation Measure M-11: The City shall continue to promote the establishment of Neighborhood Watch programs in residential neighborhoods, aimed at encouraging neighborhoods to form associations to patrol or watch for any suspicious activity. [GP EIR MM P-8]

Mitigation Measure M-12: The City shall incorporate appropriate staffing levels in the annual budget process keyed to City growth in population and employment. [GP EIR MM P-9]

c. Schools

Mitigation Measure M-13: Planning and development in the City shall continue to be integrated with the needs of school districts for new facilities. [GP EIR MM S-1]

Mitigation Measure M-14: The City shall continue to support local school districts in their efforts to obtain additional funding sources, including special assessment districts and supplementary state and federal funding. [GP EIR MM S-2]

Mitigation Measure M-15: The City shall establish and maintain effective joint use agreements with school districts serving the community to achieve optimum, cost effective use of school facilities. [GP EIR MM S-3]

Mitigation Measure M-16: The City shall continue to withhold building permits until verification that applicable school fees have been collected by the appropriate school district. [GP EIR MM S-4]

Mitigation Measure M-17: The City shall collaborate with school districts in designing adjacent school/recreation facilities to achieve maximum usability and cost effectiveness for both the City and the school districts. [GP EIR MM S-5]

Mitigation Measure M-18: The City shall collaborate with school districts in expanding educational opportunities and programs that benefit from City facilities. [GP EIR MM S-6].

d. Parks and Recreation

Mitigation Measure M-19: A wide variety of parks and recreation facilities, including regional, community, neighborhood and sub-neighborhood parks, shall be provided throughout the City. [GP EIR MM PR-1]

Mitigation Measure M-20: The design of all parks shall meet the particular needs of the specialized populations they serve, such as seniors, young adults, families, and children. [GP EIR MM PR-2]

Mitigation Measure M-21: Barrier-free access to all parks shall be provided. [GP EIR MM PR-3]

Mitigation Measure M-22: The park standards for the City shall be two-acres per thousand residents for community parks and three-acres per thousand for neighborhood parks. [GP EIR MM PR-4]

Mitigation Measure M-23: Each park within the City shall provide a variety of activity options for users, including active and passive uses. [GP EIR MM PR-5]

Mitigation Measure M-24: The City shall reevaluate the design of each of its parks as part of the periodic update of its Parks, Recreation, and Trails Master Plan. [GP EIR MM PR-6]

Mitigation Measure M-25: Each park within the City shall be evaluated for safety on a periodic basis. [GP EIR MM PR-7]

e. Libraries

Mitigation Measure M-26: The City shall continue to coordinate its library services with surrounding school districts. [GP EIR MM LS-2]

Mitigation Measure M-27: The City shall evaluate methods of expanding library services through staffing strategies, technical advancements and facilities design. [GP EIR MM LS-3]

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the recommended mitigation measures and payment of applicable Development Fees would ensure that impacts related to public services are less than significant. Thus, no significant unavoidable impacts are anticipated to occur.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
N. TRANSPORTATION/TRAFFIC

1. INTRODUCTION

This section analyzes potential impacts associated with construction traffic; and operational impacts on the following facilities: roadway intersections, neighborhood street segments, the regional transportation system, public transit, parking, access, and pedestrian/bicycle safety. It also addresses project consistency with transportation plans. Information for this analysis is based on a Traffic Impact Analysis (TIA), prepared for the proposed Specific Plan by Kunzman Associates, Inc. (Kunzman) in December 2013, as well as a Trip Generation Comparison Analysis prepared by Kunzman in November 2014 to address potential additional residential density, both of which are included in Appendix J of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

The project site is located in a relatively less urbanized within the City of Fontana. In general, the majority of streets within the study area are under the jurisdiction of the City of Fontana; however, some of the streets in the study area fall within the City of Rancho Cucamonga's and City of Rialto's jurisdictions.

(1) Classification of Streets

For the purposes of analysis and evaluation of roadway needs, a roadway functional classification system has been established for the City of Fontana. These classifications are divided into Standard and Modified categories. Typical cross-section elements associated with each standard classification are shown in the City's adopted Street Design Guidelines on file with the City Engineer. Street cross-sections that require deviation from the typical cross-sections are also shown in the City's adopted Street Design Guidelines on file with the City Engineer. Modified cross-sections shall only be applicable to infill areas where substantial development exists with existing physical constraints, including street improvements. In no case shall the modified cross-section be less than the existing adjacent cross-section or the previously adopted cross-section for the street on this General Plan.

Additional right-of-way dedication beyond the approved typical cross-section may be required in order to accommodate additional turn lanes in order to maintain acceptable levels of service per City requirements. The City has adopted Standard Intersection Geometry Layouts which are on file in the adopted Street Design Guidelines.

The six roadway classifications for the City of Fontana are described as follows:

Major Highways – These roadways can accommodate six or eight travel lanes and may have raised medians. These facilities carry high traffic volumes and are the primary thoroughfares linking Fontana with adjacent cities and the regional highway system. Driveway access to these roadways is typically limited to provide efficient high volume traffic flow. Right of way (including sidewalks) on these facilities varies between 132

and 156 feet depending on the number of lanes. See the City's adopted Street Design Guidelines on file with the City Engineer.

Primary Highways – These roadways are designed to accommodate four travel lanes with a median, within a typical 104-foot right of way, carry high traffic volumes and provide limited access. Their primary function is to link the major highways to the secondary highways as well as to carry vehicles entering and exiting the City from neighboring areas. Driveway access is also typically limited on these facilities, where feasible. See the City's adopted Street Design Guidelines on file with the City Engineer.

Secondary Highways – These roadways are typically four-lane streets, providing two lanes in each direction. These highways carry traffic along the perimeters of major developments, provide support to the major and primary highways, and are also through streets enabling traffic to travel uninterrupted for longer distances through the City. Secondary highways have a 92-foot wide right of way, which includes sidewalks. See the City's adopted Street Design Guidelines on file with the City Engineer.

Collector Streets – These roadways are typically two-lane streets that connect the local streets with the secondary highways allowing local traffic to access the regional transportation facilities. Collector streets have a 68-foot wide right of way. See the City's adopted Street Design Guidelines on file with the City Engineer.

Industrial Collectors – These roadways are typically two-lane streets, which are designed to accommodate industrial traffic. Industrial collectors also have an 80-foot wide right of way, which includes sidewalks. See the City's adopted Street Design Guidelines on file with the City Engineer.

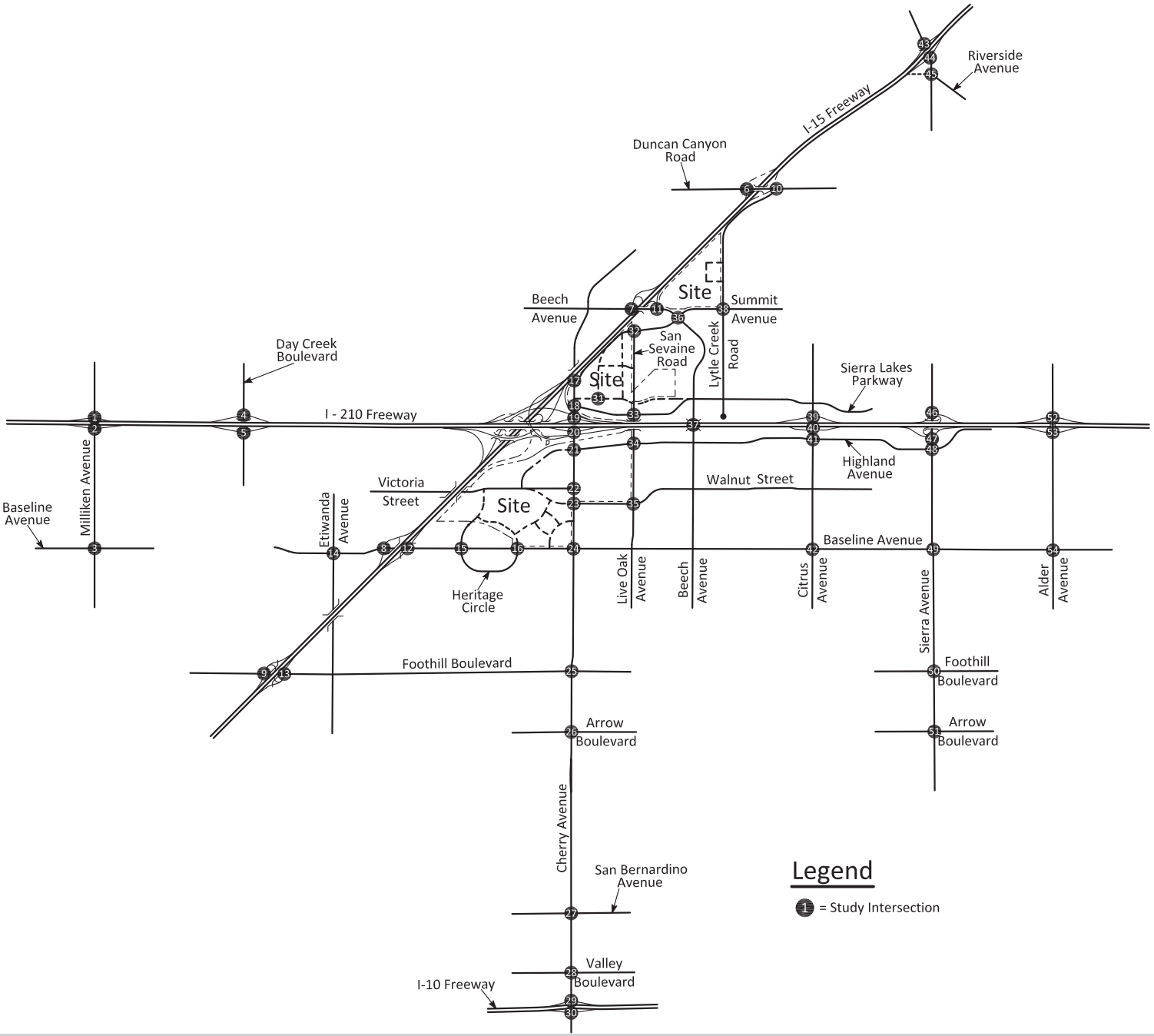
Local Streets – These roadways are typically two-lane streets that designed to serve neighborhoods within residential areas. There are several variations on local streets depending on location, length of the street, and type of land use. These are illustrated in the City's adopted Street Design Guidelines on file with the City Engineer.

As described in further detail below, the study area is well served by a network of freeways and streets. The main roadways serving the project site, as well as the intersections that were selected for analysis in the TIA are shown below in **Figure 4.N-1**, *Study Intersection Map.*

(2) Freeway System

Regional access to and from the project area is provided by the I-15 Freeway, which runs generally north-south immediately adjacent to and west of the project site, and the SR-210 Freeway, which runs east-west and bisects the project site .

The Ontario Freeway (I-15) runs in a northeast-southwest direction immediately west of the project site and extends from its junction with Interstate 8 in San Diego, California, to the Canadian border in the U.S. state of Montana. In the vicinity of the project area study area, I-15 freeway provides four lanes in each direction. Interchanges are provided at Baseline Avenue, SR-210, and Beech Avenue/Summit Avenue in the study area.



Not to scale

Study Intersection Map

Westgate Specific Plan

Source: Kuzman Associates, Inc., 2012.

FIGURE **4.N-1**

This page is intentionally blank.

The Foothill Freeway (SR-210) runs in an east-west direction and extends from the State Route 57 (Orange Freeway) in Glendora eastward to Interstate 10 in Redlands. In the vicinity of the study area, the freeway provides three lanes plus one High Occupancy Vehicle (HOV) lane in each direction. Interchanges closest to the project site are located at I-15 and Citrus Avenue.

(3) Local Street System

Local access is provided by various roadways in the vicinity of the site. The east-west roadways which will be most affected by the project include Riverside Avenue, Duncan Canyon Road, Summit Avenue, Sierra Lakes Parkway, Highland Avenue, Victoria Street, Walnut Avenue, Baseline Avenue, Foothill Boulevard, Arrow Boulevard, and San Bernardino Avenue. The north-south roadways expected to provide local access include Milliken Avenue, Day Creek Boulevard, Etiwanda Avenue, Cherry Avenue, San Sevaine Road, Beech Avenue, Lytle Creek Road, Citrus Avenue, Sierra Avenue, and Alder Avenue.

It should be noted that along Cherry Avenue, Victoria Street and Walnut Avenue operate as T-intersections but will ultimately be connected in the future to function as a four-way intersection. In addition, under future conditions Summit Avenue would be connected to Sierra Lakes Parkway and not Cherry Avenue.

(4) Public Transit

Public transportation in the Fontana area is provided by Omnitrans, the regional Public Transit operator for San Bernardino County. Omnitrans functions as a joint powers agency supported by the County of San Bernardino and all the cities in the east and west San Bernardino Valley. The City of Fontana is represented on the Omnitrans Board. Omnitrans is financed through the State Transit Development Act and Urban Mass Transit Funds. Omnitrans service in Fontana is primarily oriented in the east-west direction, connecting the City to the adjacent communities of Rialto, San Bernardino and Colton to the east and Rancho Cucamonga, Ontario, Montclair, and Pomona to the west. Currently, Omnitrans provides service on two fixed routes in the project area:

- **Route 67** – this route provides transit between the Fontana Metrolink Station and Montclair Transit Center primarily via Sierra Avenue, Baseline Avenue/16th Street, and Mountain Avenue.
- **Route 82** – this route provides service between Summit High School in Fontana and the Rancho Cucamonga Civic Center primarily via Sierra Avenue, Jurupa Avenue, and Haven Avenue with stops at the Fontana Metrolink Station, Jurupa Hills High School, and Ontario Mills Mall.

Omnitrans periodically updates its serviced plan through the preparation of a Short Range Transit Plan (SRTP), which evaluates service for a five-year period. The SRTP is used as the basis for provision of new and expanded transit service in response to new development in a given area.

(5) Parking

The majority of the project area is currently vacant, and as such active uses or associated parking for such uses occur within these portions of the project site. However, parking is provided on-site for the existing multi-tenant office building located at 6101 Cherry Avenue, the existing Caltrans Southern California Regional Lab, and the existing Falcon Ridge Town Center. Parking for these uses is provided pursuant to the adopted Westgate Specific Plan and FMC parking standards, as applicable.

(6) Pedestrian/Bicycle Infrastructure

(a) Pedestrian Facilities

The project area has a limited network of pedestrian facilities around the project site including sidewalks, crosswalks and pedestrian safety features. The developed portions of the project site provide sidewalks and landscaped strips between the roadway and the walkway along the project frontages, while undeveloped areas within the project area currently contain no pedestrian improvements.

(b) Bicycle Facilities

A number of existing and proposed bicycle routes and bicycle-friendly streets are designated within the project area.[1] These include the following facilities:

- Pacific Electric Bike Trail (existing Class I off-street)
- Baseline Avenue (existing Class II on-street)
- Summit Avenue (existing Class II on-street)
- Beech Avenue (existing Class II on-street)
- Southern California Edison Transmission Easement Trail (proposed Class I off-street)
- North Frontage Road (proposed Class I off-street)
- Walnut Street (proposed Class II on-street)
- Sierra Lakes Parkway (proposed Class II on-street)

(7) Existing Volumes of the Study Intersections

The existing average daily traffic volumes were obtained from the *2012 Traffic Volumes on California State Highways* by the California Department of Transportation and factored from peak hour counts obtained by Kunzman Associates, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach + Exit Volume) x 11.5 = Daily Leg Volume.

The City of Fontana Engineering staff has provided a sample of actual average daily traffic counts and the estimates were generally found to be greater, thus validating the methodology.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. in January/April/May/August/September/October 2012, and April 2013 (see Appendix B of the project's TIA [Appendix J of this Draft EIR]) and shown on Figures 5 and 6, respectively, of the TIA. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two-hour period from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

[1] *San Bernardino Associated Governments (SANBAG), "San Bernardino County Non-Motorized Transportation Plan," Figure 3.5, Bicycle Facilities – West Valley. March 2011.*

The morning and evening peak hour traffic counts have been converted to Passenger Car Equivalents (PCEs). The following PCEs were utilized throughout the TIA based on the *San Bernardino Association of Governments, Congestion Management Program, Appendix C: Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County (2005)*:

- 2 axle = 1.5
- 3 axle = 2.0
- 4+ axle = 3.0

(8) Existing Plus Project Roadway Segment Capacity Analysis

Existing roadway segment capacity analysis is shown in Table 1 of the project's TIA. The study area roadway segments currently provide sufficient capacity for existing traffic conditions, except for the following roadway segments:

Cherry Avenue:

North of Sierra Lakes Parkway to Sierra Lakes Parkway

Sierra Lakes Parkway to I-210 Freeway

(9) Existing Level of Service

The existing delay and Level of Service for intersections in the vicinity of the project are shown in Table 2 of the project's TIA. The following study area intersections currently operate at unacceptable Levels of Service during the peak hours for existing traffic conditions:

Cherry Avenue (NS) at:

Summit Avenue (EW) - #17

Highland Avenue (EW) - #21

Walnut Avenue/Victoria Street (EW) - #22

Baseline Avenue (EW) - #24

Foothill Boulevard (EW) - #25

San Bernardino Avenue (EW) - #27

Valley Boulevard (EW) - #28

I-10 Freeway WB Ramps (EW) - #29

I-10 Freeway EB Ramps (EW) - #30

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

I-15 Freeway SB Ramps (EW) - #43

Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

Existing delay worksheets are provided in Appendix D of the project TIA.

(10) Existing Traffic Signal Warrant Analysis

Traffic signals are projected to be warranted at the following additional study area intersections for Year 2018 Without Project traffic conditions (see Appendix F of the project's TIA):

Cherry Avenue (NS) at:

Sierra Lakes Parkway (EW) - #18

Walnut Street/Victoria Street (EW) - #23

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Traffic signals are projected to be warranted at the following additional study area intersections for Year 2035 Without Project traffic conditions (see Appendix F of the project's TIA):

I-15 Freeway SB Ramps (NS) at:

Duncan Canyon Road (EW) - #6

I-15 Freeway NB Ramps (NS) at:

Duncan Canyon Road (EW) - #10

San Sevaine Road (NS) at:

Sierra Lakes Parkway (EW) - #33

Highland Avenue (EW) - #34

Traffic signals are projected to be warranted at the following additional study area intersections for Year 2035 With Project traffic conditions (see Appendix F of the project's TIA):

San Sevaine Road (NS) at:

Summit Avenue (EW) - #32

Walnut Avenue (EW) - #35

The unsignalized intersections have been evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the *California Manual on Uniform Traffic Control Devices*, dated January 2012.

(11) Planned Transportation Improvements and Relationship to General Plan

Figure 7 in the project's TIA illustrates the current City of Fontana General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the land use element of the General Plan and serves to coordinate future arterials between local jurisdictions. The City of Fontana General Plan roadway cross-sections are illustrated on Figures 8 to 14 of the project's TIA.

Figure 15 in the project's TIA shows the current City of Rancho Cucamonga General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 15. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the land use element of the General Plan and serves to coordinate future arterials between local jurisdictions. The City of Rancho Cucamonga General Plan roadway cross-sections are illustrated on Figures 16 and 17 of the project's TIA.

Figure 18 in the project's TIA shows the current City of Rialto General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 18. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the land use element of the General Plan and serves to coordinate future arterials between local jurisdictions. The City of Rialto General Plan roadway cross-sections are illustrated on Figure 19 in the project's TIA.

b. Regulatory Framework

(1) California State Transportation Improvement Program

The California Transportation Commission (CTC) administers the State's transportation programming. Transportation programming is the public decision-making process that sets priorities and funds projects envisioned in long-rang transportation plans. The CTC commits expected revenues over a multi-year period to transportation projects. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources. The California Department of Transportation (Caltrans) manages operation of State highways and freeways and interstate routes. In the vicinity of the project site these would include I-10, I-15, I-215, SR-210 and SR-60, all of which pass through the City.

The Caltrans Project Development Procedures, which include Project Study Reports (PSR), Project Report (PR), preliminary engineering (PE), and plans, specifications and engineering estimates (PS&E) are tools for implementing improvements consistent with the City of Fontana General Plan Circulation Element on the State-owned transportation facilities such as freeways, interchange ramps, freeway over-crossings, park-and-ride facilities, and improvements to conventional State highways (surface street routes).

(2) Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The 2012-2035 RTP/SCS is a long-range regional transportation plan that provides a blueprint to help achieve a coordinated and balanced regional transportation system in the SCAG region, which is composed of six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region, and includes short- and long-range population, housing, and employment projections for local, subregional, and regional geographies that are utilized for regional planning efforts including long-range transportation planning.

(3) SANBAG Congestion Management Plan

Proposition 111, passed in June 1990, provided additional transportation funding to cities and counties in California. Included with the provision for additional transportation funding was a requirement to undertake a Congestion Management Program (CMP) within each county with an urbanized area having a population of 50,000 or more, to be developed and adopted by a designated Congestion Management Agency (CMA). Within the County of San Bernardino (County), the San Bernardino Associated Governments (SANBAG) was designated the CMA by the County Board of Supervisors and a majority of the cities representing a majority of the incorporated population. The original document was adopted in November 1992. It has been updated eight times, the latest version of which was adopted in 2007. However, an update is currently pending and was scheduled for completion in late 2013, but is currently available for public review through June 2014.

The CMP defines a network of state highways and arterials, level of service standards and related procedures, and provides technical justification for its approaches. Key intersections include all CMP intersections plus other identified by local jurisdictions as being important to maintaining mobility on the CMP system. For the CMP, intersections operating at level of service (LOS) D or lower will normally be considered key intersections, in addition to the intersections of two CMP roadways. All projects that meet the threshold for the CMP are subject to preparation of CMP Traffic Impact Analyses per CMP Guidelines. CMP TIAs identify various local and regional circulation system improvements and impact shares as conditions for the development of the subject project. The conditions help to implement the goals and policies of the General Plan Circulation Element.

Baseline Avenue, Highland Avenue, Cherry Avenue, Citrus Avenue, I-15, and SR-210, all located within or at the border of the project site, are all CMP roadways. However, since the City of Fontana has a standard program (Circulation Development Fees) to fund regional improvements, SANBAG considers the City exempt from CMP traffic impact analysis. As such, no CMP analysis is required for the proposed project.

(4) City of Fontana General Plan

The City's General Plan includes a Circulation Element, which provides a blueprint for the City's transportation network. That network is intended to serve the future land use pattern and intensities of development envisioned by the General Plan. The Circulation Element also includes policies and programs to enhance the efficiency of the City's transportation system, including those programs called out as mitigation measures in the City of Fontana General Plan EIR.

3. PROJECT IMPACTS

a. Methodology

(1) Traffic Impact Analysis Approach and Assumptions

(a) Proposed Specific Plan TIA

Based upon discussions with City of Fontana staff, the average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 average daily traffic volume forecasts, as summarized in Appendix C of the project's TIA (included as Appendix J of this Draft EIR). This difference defines the growth in traffic over the 27-year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2013 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2013 and Year 2035 is 22 years of the 27-year time frame, a factor of 0.81 (i.e., 22/27) was used.

The Year 2035 daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C of the TIA. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the *National Cooperative Highway Research Program Report 255*. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Year 2035 San Bernardino Transportation Analysis Model was run with the proposed project land uses in the project traffic analysis zones. The San Bernardino Transportation Analysis Model utilizes socio-economic data based on the proposed project land uses and quantities for its analysis. Therefore, to analyze the level of service for Year 2035 with full buildout of the project traffic, it was necessary to manually add the entire project buildout trip generation project traffic to the Year 2035 traffic volumes developed by the model.

Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The Year 2018 traffic projections have been interpolated between Year 2035 traffic volumes and existing traffic volumes utilizing a portion of the growth increment.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix D of the TIA) based on the *Highway Capacity Manual – Transportation Research Board*

Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. Signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies that the traffic volume demand is greater than the capacity of the intersection and as a result traffic may begin to queue during the analyzed peak hour.

Per City of Fontana traffic study guidelines, all analysis factors and procedures have been obtained from the San Bernardino Association of Governments, *Congestion Management Program, Appendix C: Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County*, 2005.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings have also been considered in the signalized intersection analysis. All Highway Capacity Manual Level of Service calculations have accounted for a minimum pedestrian walking time that meets or exceeds that calculated by the following formula (see Appendix E of the TIA):

[(Curb to curb distance) / (3.5 feet/second)] + 7 seconds.

For existing/existing plus project/Year 2018 traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Year 2035 traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15-minute volumes for analysis purposes using the existing observed peak 15-minute to peak hour factors for all scenarios analyzed. In accordance with the San Bernardino County Congestion Management Program, the Year 2035 peak hour factor has been adjusted upwards to 0.95. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

The traffic mitigation needs anticipated at Year 2035 were combined into a summary of mitigation requirements and costs. The mitigation cost responsibility for the proposed development was estimated based on the percent of the increase in traffic from the existing condition to the Year 2035 that was attributed to the project-generated traffic.

(b) High Density Residential Traffic Generation Comparison Analysis

As relates to the provision of potential high density residential development within Planning Area 24, the Supplemental Trip Generation Analysis prepared by Kunzman summarizes the net increase in traffic

generation within the Specific Plan area under that development scenario. Using the same traffic generation factors and methodology, the Supplemental Trip Generation Analysis calculates the net increase in daily traffic, as well as AM and PM peak hour trips associated with the provision of R-4 residential uses within Planning Areas 16, 19, and 24. Although the Supplemental Trip Generation Analysis addresses potential R-4 residential development in these three Planning Areas, only the development within Planning Area 24 is relevant to the analysis presented in this section.

The trips generated by the additional high density residential uses were determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the project land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. The trip generation rates are from the Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012 and consistent with the Westgate Specific Plan TIA.

(2) Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of Fontana requirements.

(a) Definition of Deficiency

The definition of an intersection deficiency has been obtained from the City of Fontana General Plan and through discussions with City of Fontana staff. The General Plan states that peak hour intersection operations of Level of Service C or better are generally acceptable. Therefore, any intersection operating at Level of Service D to F will be considered deficient.

The adjacent City of Rancho Cucamonga and City of Rialto General Plans both state that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E to F will be considered deficient in these cities.

As stated in the Congestion Management Program, a Level of Service D is generally acceptable for State highway facilities, but the average delay shall not exceed 45 seconds per vehicle.

(b) Definition of Significant Impact

The identification of significant impacts is a requirement of California Environmental Quality Act. The City of Fontana General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and as such impacts associated with implementation of planned facilities identified in the Circulation Element have been previously evaluated and appropriate mitigation measures to address them would be implemented, as necessary, to address such impacts. Therefore, any roadway improvements within the City of Fontana that are consistent with those identified in the Circulation

Element are not considered a significant impact, so long as the project contributes its "fair share" funding for improvements.

A traffic impact is considered significant if the project both: (1) contributes measurable traffic to and (2) substantially and adversely changes the level of service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions.

As stated in the City of Fontana General Plan: "All streets and intersections designed after the adoption of the General Plan will be planned to function at Level of Service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible." In instances where Level of Service C is not feasible, particularly because of existing development, then Level of Service D may be considered acceptable. In this analysis, an impact is considered significant if the proposed project causes an intersection to drop below Level of Service C. All intersection impacts in the City of Fontana have been mitigated to Level of Service C, whenever feasible.

Level of Service D or better has been maintained for facilities in the City of Rancho Cucamonga and the City of Rialto. Level of Service D or better with a maximum 45 seconds average delay per vehicle has been maintained for State highway facilities.

(3) Traffic Contribution Test

The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours for State Highway facilities.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including traffic and transportation. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to traffic and transportation would occur if the project would result in one or more of the following:

Threshold 1: 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 (refer to Impact Statement 4.N-1 below);

Threshold 2: 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 and highways (refer to Impact Statement 4.N-2 below);

Threshold 3: 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 (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A. No impact would occur in this regard.);

Threshold 4: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact Statement 4.N-3 below);

Threshold 5: Result in inadequate emergency access (refer to Section 4.G, *Hazards and Hazardous Materials*, of this Draft EIR);

Threshold 6: Result in inadequate parking capacity (refer to Impact Statement 4.N-4 below); or

Threshold 7: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (refer to Impact Statement 4.N-5 below);

c. Project Design Features

(1) Construction

Construction of the project would occur incrementally over an approximately 20-year period with full occupancy expected by 2035. Chapter 18 of the FMC requires that construction activities be limited to the hours from 7:00 A.M. to 6:00 P.M. on weekdays and from 8:00 A.M. to 5:00 P.M. on Saturdays (with no construction on Sundays and holidays); as such, construction activities within the Specific Plan area would only occur during these hours unless otherwise specified by the City of Fontana Department of Building and Safety.

To optimize the circulation pattern and protect residential areas within the project area and the City of Fontana as a whole, certain arterials have been designated as truck routes. These arterial truck routes are illustrated in Figure 4-2, *Designated Truck Routes*, in the General Plan Circulation Element. Within the project area the designated truck routes include I-15, SR-210, Cherry Avenue (south of SR-210 only), and Baseline Avenue. Haul and delivery trucks would be required to follow these or other City-designated truck routes during future construction activities.

(2) Operation

The proposed development consists of 68 planning areas. Planning Areas 1 to 11 are located north of Summit Avenue between the I-15 Freeway to the west and Lytle Creek Road to the east. Planning Areas 12 to 26 are located north of the SR-210 Freeway between the I-15 Freeway to the west and Beech Avenue to the east. Planning Areas 27 to 39 are located bounded by the SR-210 Freeway to the north, Walnut Avenue to the south, Cherry Avenue to the west, and San Sevaine Road to the east. Planning Areas 40 to 68 are located north of Baseline Avenue between the I-15 Freeway to the west and Cherry Avenue to the east. The proposed Specific Plan includes a comprehensive circulation plan that has been designed to meet the

ultimate traffic demands of future uses on-site, and is illustrated in Figure 2-16, *Circulation Plan*, in Chapter 2.0, *Project Description*, of this Draft EIR.

Section 4.0, *Development Regulations*, of the proposed Specific Plan provides roadway classifications and cross-sections, intersection designs, vehicular access and parking requirements, as well as bicycle and pedestrian trail standards, in order to guide the development of circulation facilities that will ensure safe and adequate transportation for future on-site development. The various pedestrian and bicycle facilities provided by the proposed Specific Plan are illustrated below in Figure 2-15, *Bikeways and Trails Plan*, in Chapter 2.0, *Project Description*, of this Draft EIR.

d. Analysis of Project Impacts

(1) Traffic System Impacts

Threshold	Would 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?

Impact 4.N-1 Implementation of the proposed project under Existing Plus Project, Phase 1 (Year 2018), and Buildout (Year 2035) conditions would not 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. With implementation of applicable mitigation measures and/or payment of fair-share contributions to necessary traffic system improvements, this impact is considered less than significant unless high density residential uses are developed within Planning Area 24, in which case impacts under Buildout conditions would be considered significant and unavoidable even with mitigation.

(a) Construction Impacts

As described in Chapter 2, *Project Description*, of this Draft EIR, the proposed Specific Plan would be implemented incrementally over several phases. Construction of each specific development project within the various Planning Areas would commence with a site clearing stage, during which time any existing structures would be removed. The next stage would involve on- and off-site infrastructure improvements, utility connections, site clearance, grading and site preparation, followed by construction of structures.

Construction trips associated with trucks and employees traveling to and from the site in the morning and afternoon may result in some minor traffic delays on local streets in the area; potential traffic interference caused by construction vehicles may create a temporary/short-term impact to vehicles using the street system in the immediate area in the morning and afternoon hours. It is anticipated that a majority of the construction-related traffic would use both I-15 and SR-210 to gain regional access to the site. Vehicle trips would result from haul and/or material delivery truck trips as well as from construction workers traveling to and from the site. While this would generally increase traffic on streets and highways in the project area on

a temporary basis during construction activities, construction-related traffic would be considerably less than the operational traffic. Therefore, the operational analysis provided below presents a conservative analysis of traffic impacts and as such no further quantitative analysis is necessary. Traffic impacts to the adjacent roadway network associated with project construction activities would be minimal and short-term. Therefore, aside from the nuisance traffic that would occur as a result of construction-related traffic (e.g., construction materials, construction workers, etc.), impacts resulting from construction traffic would be less than significant.

(b) Project Operational Trip Generation

(i) Proposed Specific Plan Trip Generation

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantities of land uses. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the traffic generation rates by the land use quantities, the traffic volumes are determined.

Table 3 of the project's TIA (Appendix J of this Draft EIR) shows the project trip generation rates obtained from the Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012 and San Diego Association of Governments, *Traffic Generators*, April 2002. Traffic volumes shown in Tables 4 and 5 of the project's TIA consist of the total trips generated for each project land use. As a residential trip generated by the project will also be making trips to a commercial, office, industrial, school, or recreational land use within the project, a double counting of those trips occurs.

As shown in Table 4 of the TIA, Phase 1 of the development is projected to generate a total of approximately 25,745 daily vehicle trips, 1,736 of which will occur during the morning peak hour and 2,048 of which will occur during the evening peak hour. As shown in Table 5 of the TIA, buildout of the development is projected to generate a total of approximately 84,579 daily vehicle trips, 9,807 of which will occur during the morning peak hour and 9,109 of which will occur during the evening peak hour.

It should be noted that the industrial land uses are part of larger planning areas designated as business parks. As part of the business parks, which are 80% office uses, the industrial components would likely be linked to and serve more of a supporting role to the office land uses. The industrial land uses were included in the internal capture to account for the home to/from work trips made by employees of the office/industrial land uses. Trucks tend to avoid peak hour traffic and it is fair to assume that most of the trips generated by the industrial land uses would be home to/from work based trips.

Furthermore, the term "industrial park" for this particular project is somewhat of a misnomer, as it implies a truck intensive facility. The 336,968 square feet of "industrial park" is divided over more than 10 separate planning areas, which means the industrial park land uses are likely to be small businesses rather than heavy industrial uses. Based on the supportive role to the office land uses, any truck trips generated by the

industrial parks are likely to be small two-axle trucks and on the lower end of the 1 to 22 percent range described in the Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012.

The 336,968 square feet of "industrial park" is projected to generate approximately 285 evening peak hour trips. The proposed "industrial park" land uses would likely be below average truck generators, but even at the average of 8%, this would generate 23 truck trips during the evening peak hour. This is equal to 0.3% (23/9,158) of the total evening peak hour trips for the entire project. Passenger Car Equivalents (PCEs) were not calculated in the analysis because any truck trips generated by the project are insignificant to the overall traffic analysis.

It should be noted that the commercial retail and shopping center land uses are both based on the Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012 category 820. The separate classification is due to the square footages of the retail land uses in question. For Planning Area 41, the rates are used and the equations are used for Planning Area 68. This has been done based on information from the Institute of Transportation Engineers.

The calculations for the high-cube warehouse portion of Planning Area 41 have been included in Table 5 of the project's TIA.

(ii) High Density Residential Trip Generation

The projected trip generation comparison calculations for Planning Area 24 are located in Table 2 of the Trip Generation Comparison Analysis (included in Appendix J of this Draft EIR). The previous Mixed Use-1 designation in Planning Area 24 when compared to the R-4 high density residential designation is projected to generate a total of approximately 4,302 more daily vehicle trips, 46 less of which would occur during the morning peak hour and 219 more of which would occur during the evening peak hour.

(c) Project Operational Trip Distribution

In order to quantify the land uses within the project site, the project was divided into six traffic analysis zones as illustrated on Figure 20 of the project's TIA (Appendix J of this Draft EIR). Figures 21 to 55 of the project's TIA contain the directional distributions of the project traffic for the proposed land uses.

The trip distributions of the project traffic were based on the select zone evening peak period trip distribution from the San Bernardino Transportation Analysis Model. Historically, traffic impact analyses in the County of San Bernardino have been prepared in this manner with the theory being that the morning peak hour select zone trip distribution percentages would be the same as the evening peak hour select zone, except the inbound and outbound trips being reversed. For instance, a vehicle likely travels the same route from work to home in the evening peak hour as travelled in the morning peak hour. The assignment of inbound versus outbound trips is accounted for in the project trip generation.

The socio-economic data inputs to the San Bernardino Transportation Analysis Model are representative of the proposed project development intensity and land uses. That is, the Year 2035 San Bernardino Transportation Analysis Model was run with the proposed project land uses in the project traffic analysis zones. The school trip distributions are based upon the school district boundaries and the park trip distributions are based upon the project boundaries.

For Phase 1 conditions, project distributions through the proposed segments of Highland Avenue west of Cherry Avenue and through Summit Avenue between Sierra Lakes Parkway and San Sevaine Road have been rerouted to the nearest likely path. Project traffic through the Duncan Canyon Interchange at the I-15 Freeway has also been rerouted to the next nearest interchange or shortest side street.

(d) Project Operational Trip Assignment

Based on the identified traffic generation and distributions, project Phase 1 and project buildout average daily traffic volumes have been calculated and shown on Figures 56 and 57 of the project's TIA. Morning and evening peak hour intersection turning movement volumes expected from the project Phase 1 are shown on Figures 58 and 59, respectively. Morning and evening peak hour intersection turning movement volumes expected from the project buildout are shown on Figures 60 and 61, respectively.

(e) Existing Plus Project Condition Impacts

(i) Existing Plus Project Roadway Segment Capacity Analysis

Existing Plus Project Phase 1 roadway segment capacity analysis is shown in Table 6 of the project's TIA with interim roadway widening on Cherry Avenue. As shown in Table 6, the study area roadway segments are projected to provide sufficient capacity for Existing Plus Project Phase 1 traffic conditions.

Existing Plus Project Buildout roadway segment capacity analysis is shown in Table 7 of the project's TIA based on the existing traffic system and the General Plan Circulation Master Plan. As shown in Table 7, the study area roadway segments are projected to provide sufficient capacity for Existing Plus Project Buildout traffic conditions.

(ii) Existing Plus Project Intersection Level of Service

Existing Plus Project Phase 1

The Existing Plus Project Phase 1 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 8 of the project's TIA. Table 8 shows delay values based on the geometrics at the study area intersections, without improvements. Existing Plus Project Phase 1 delay calculation worksheets are provided in Appendix D of the project's TIA. Existing Plus Project Phase 1 morning and evening peak hour intersection turning movement volumes are shown on Figures 49 and 50, respectively.

For Existing Plus Project Phase 1 traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

Cherry Avenue (NS) at:

Summit Avenue (EW) - #17

Sierra Lakes Parkway (EW) - #18

Highland Avenue (EW) - #21

Walnut/Victoria Street (EW) - #23

Baseline Avenue (EW) - #24

Foothill Boulevard (EW) - #25

San Bernardino Avenue (EW) - #27

Valley Boulevard (EW) - #28

I-10 Freeway WB Ramps (EW) - #29

I-10 Freeway EB Ramps (EW) - #30

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

I-15 Freeway SB Ramps (EW) - #43

Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

The Existing Plus Project Phase 1 delay and Level of Service for the study area roadway network with improvements are shown in Table 9 of the project's TIA. Improvements presented in Table 9 include both funded improvements and any additional improvements needed to achieve acceptable Levels of Service during the peak hours.

Existing Plus Project Phase 1 (with improvements) delay calculation worksheets are provided in Appendix D of the project's TIA. As shown in Table 9 of the project's TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions and the project does not cause any significant impacts, with implementation of improvements included as mitigation below. It should be noted that development within Planning Area 24 would not occur as part of Phase 1 development, and as such impacts associated with development of high density residential uses within this Planning Area would be the same as under the proposed Specific Plan and thus impacts would be less than significant with mitigation.

Existing Plus Project Buildout

The Existing Plus Project Buildout delay and Level of Service for the study area roadway network without the proposed project are shown in Table 10 of the project's TIA. Table 10 shows delay values based on the geometrics at the study area intersections, without improvements. Existing Plus Project Buildout delay calculation worksheets are provided in Appendix D of the project's TIA. Existing Plus Project Buildout morning and evening peak hour intersection turning movement volumes are shown on Figures 64 and 65, respectively, of the project's TIA.

For Existing Plus Project Buildout traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

I-15 Freeway SB Ramps (NS) at:

- Beech Avenue (EW) - #7

I-15 Freeway NB Ramps (NS) at:

- Baseline Avenue (EW) - #12

Heritage Circle (West) (NS) at:

- Baseline Avenue (EW) - #15

Cherry Avenue (NS) at:

- Sierra Lakes Parkway (EW) - #18
- Highland Avenue (EW) - #21
- Walnut/Victoria Street (EW) - #23
- Baseline Avenue (EW) - #24
- Foothill Boulevard (EW) - #25
- San Bernardino Avenue (EW) - #27
- Valley Boulevard (EW) - #28
- I-10 Freeway WB Ramps (EW) - #29
- I-10 Freeway EB Ramps (EW) - #30

Summit Avenue (NS) at:

- Sierra Lakes Parkway (EW) - #31

San Sevaine Road (NS) at:

- Summit Avenue (EW) - #32
- Sierra Lakes Parkway (EW) - #33
- Highland Avenue (EW) - #34
- Walnut Avenue (EW) - #35

Beech Avenue (NS) at:

- Summit Avenue (EW) - #36
- SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

- I-15 Freeway SB Ramps (EW) - #43
- Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

The Existing Plus Project Buildout delay and Level of Service for the study area roadway network with improvements are shown in Table 11 of the project's TIA. Improvements presented in Table 11 include both funded improvements and any additional improvements needed to achieve acceptable Levels of Service during the peak hours. Existing Plus Project Buildout (with improvements) delay calculation worksheets are provided in Appendix D of the project's TIA. As shown in Table 11, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Existing Plus Project Buildout traffic conditions and the project does not cause any significant impacts, with implementation of improvements included as mitigation below, assuming no high density residential uses are developed in Planning Area 24. However, due to the increased overall traffic generation associated with potential high density residential uses within Planning Area 24 (i.e., 4,302 additional daily vehicle trips, 46 less of which would occur during the morning peak hour and 219 more of which would occur during the evening peak hour), significant impacts to affected intersections could occur even with implementation of applicable mitigation measures. As such, intersection impacts under Existing Plus Project Buildout conditions are considered significant and unavoidable.

(f) Future Condition (Year 2018 and Year 2035) Impacts

As described above, based upon discussions with City of Fontana staff, the average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C of the project's TIA). This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2013 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2013 and Year 2035 is 22 years of the 27 year time frame, a factor of 0.81 (i.e., 22/27) was used.

The Year 2018 traffic projections have been interpolated between Year 2035 traffic volumes and existing traffic volumes utilizing a portion of the growth increment.

(i) Future Average Daily Traffic Volumes

(a) Year 2018 Without Project

The average daily traffic volumes for Year 2018 Without Project traffic conditions have been determined and are shown on Figure 66 of the project's TIA.

(b) Year 2018 With Project Phase 1

The average daily traffic volumes for Year 2018 With Project Phase 1 traffic conditions have been determined and are shown on Figure 67 of the project's TIA. Year 2018 With Project Phase 1 roadway segment capacity analysis is shown in Table 12 of the TIA with interim roadway widening. As shown in

Table 12, the study area roadway segments are projected to provide sufficient capacity for Year 2018 With Project Phase 1 traffic conditions.

(c) Year 2035 Without Project

The average daily traffic volumes for Year 2035 Without Project traffic conditions have been determined and are shown on Figure 68 of the project's TIA.

(d) Year 2035 With Project Buildout

The average daily traffic volumes for Year 2035 With Project Buildout traffic conditions have been determined and are shown on Figure 69 of the project's TIA. Year 2035 With Project Buildout roadway segment capacity analysis is shown in Table 13 of the TIA with ultimate roadway conditions. As shown on Table 13, the study area roadway segments are projected to provide sufficient capacity for Year 2035 With Project Buildout traffic conditions, including those with changes to the Circulation Master Plan, except the following study area roadway segment:

Victoria Street:

West of Cherry Avenue to Cherry Avenue

This study area roadway segment is projected to provide sufficient capacity for Year 2035 With Project Buildout traffic conditions, with improvements (see Table 12 of the project's TIA).

(ii) Future Level of Service

(a) Year 2018 Without Project

The Year 2018 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 14 of the project's TIA. Table 14 shows delay values based on the geometrics at the study area intersections, without improvements. Year 2018 Without Project delay calculation worksheets are provided in Appendix D of the TIA. Year 2018 Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 70 and 71, respectively, of the project's TIA.

For Year 2018 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

Cherry Avenue (NS) at:

Summit Avenue (EW) - #17

Sierra Lakes Parkway (EW) - #18

Highland Avenue (EW) - #21

Walnut Avenue/Victoria Street (EW) - #23

Baseline Avenue (EW) - #24

Foothill Boulevard (EW) - #25

San Bernardino Avenue (EW) - #27

Valley Boulevard (EW) - #28

I-10 Freeway WB Ramps (EW) - #29

I-10 Freeway EB Ramps (EW) - #30

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

I-15 Freeway SB Ramps (EW) - #43

I-15 Freeway NB Ramps (EW) - #44

Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

(b) Year 2018 With Project Phase 1

The Year 2018 delay and Level of Service for the study area roadway network with the proposed project Phase 1 are shown in Table 15 of the project's TIA. Table 15 shows delay values based on the geometrics at the study area intersections, without improvements. Year 2018 With Project Phase 1 delay calculation worksheets are provided in Appendix D of the project's TIA. Year 2018 With Project Phase 1 morning and evening peak hour intersection turning movement volumes are shown on Figures 72 and 73, respectively, of the TIA.

For Year 2018 With Project Phase 1 traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

Cherry Avenue (NS) at:

Summit Avenue (EW) - #17

Sierra Lakes Parkway (EW) - #18

Highland Avenue (EW) - #21

Walnut Avenue/Victoria Street (EW) - #23

Baseline Avenue (EW) - #24

Foothill Boulevard (EW) - #25

Arrow Boulevard (EW) - #26

San Bernardino Avenue (EW) - #27

Valley Boulevard (EW) - #28

I-10 Freeway WB Ramps (EW) - #29

I-10 Freeway EB Ramps (EW) - #30

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

I-15 Freeway SB Ramps (EW) - #43

I-15 Freeway NB Ramps (EW) - #44

Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

The Year 2018 With Project Phase 1 delay and Level of Service for the study area roadway network with improvements are shown in Table 16 of the project's TIA. Improvements presented in Table 16 include both funded improvements and any additional improvements needed to achieve acceptable Levels of Service during the peak hours. Year 2018 With Project Phase 1 (with improvements) delay calculation worksheets are provided in Appendix D of the TIA. As shown in Table 16, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2018 With Project Phase 1 traffic conditions and the project does not cause any significant impacts, with improvements. It should be noted that development within Planning Area 24 would not occur as part of Phase 1 development, and as such impacts associated with development of high density residential uses within this Planning Area under Year 2018 With Project Phase 1 conditions would be the same as under the proposed Specific Plan, and thus impacts would be less than significant with mitigation.

(c) Year 2035 Without Project

The Year 2035 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 17 of the project's TIA. Table 17 shows delay values based on the geometrics at the study area intersections, without improvements. Year 2035 Without Project delay calculation worksheets are provided in Appendix D of the project's TIA. Year 2035 Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 74 and 75, respectively, of the TIA.

For Year 2035 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

I-15 Freeway NB Ramps (NS) at:

Baseline Avenue (EW) - #12

Heritage Circle (West) (NS) at:

Baseline Avenue (EW) - #15

Cherry Avenue (NS) at:

Sierra Lakes Parkway (EW) - #18

Highland Avenue (EW) - #21

Walnut Avenue/Victoria Street (EW) - #23

Foothill Boulevard (EW) - #25

Arrow Boulevard (EW) - #26

San Bernardino Avenue (EW) - #27

Valley Boulevard (EW) - #28

I-10 Freeway WB Ramps (EW) - #29

I-10 Freeway EB Ramps (EW) - #30

San Sevaine Road (NS) at:

Sierra Lakes Parkway (EW) - #33

Beech Avenue (NS) at:

SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

I-15 Freeway SB Ramps (EW) - #43

I-15 Freeway NB Ramps (EW) - #44

Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

(d) Year 2035 With Project

The Year 2035 delay and Level of Service for the study area roadway network with the proposed project buildout are shown in Table 18 of the project's TIA. Table 18 shows delay values based on the geometrics at the study area intersections, without improvements. Year 2035 With Project Buildout delay calculation worksheets are provided in Appendix D of the project's TIA. Year 2035 With Project morning and evening peak hour intersection turning movement volumes are shown on Figures 76 and 77, respectively, of the TIA.

For Year 2035 With Project Buildout traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours:

I-15 Freeway SB Ramps (NS) at:

Beech Avenue (EW) - #7

I-15 Freeway NB Ramps (NS) at:

- Beech Avenue (EW) - #11
- Baseline Avenue (EW) - #12

Heritage Circle (West) (NS) at:

- Baseline Avenue (EW) - #15

Cherry Avenue (NS) at:

- Sierra Lakes Parkway (EW) - #18
- SR-210 Freeway WB Ramps (EW) - #19
- Highland Avenue (EW) - #21
- Walnut Avenue/Victoria Street (EW) - #23
- Baseline Avenue (EW) - #24
- Foothill Boulevard (EW) - #25
- Arrow Boulevard (EW) - #26
- San Bernardino Avenue (EW) - #27
- Valley Boulevard (EW) - #28
- I-10 Freeway WB Ramps (EW) - #29
- I-10 Freeway EB Ramps (EW) - #30

Summit Avenue (NS) at:

- Sierra Lakes Parkway (EW) - #31

San Sevaine Road (NS) at:

- Summit Avenue (EW) - #32
- Sierra Lakes Parkway (EW) - #33
- Highland Avenue (EW) - #34
- Walnut Avenue (EW) - #35

Beech Avenue (NS) at:

- Summit Avenue (EW) - #36
- SR-210 Freeway Ramps (EW) - #37

Sierra Avenue (NS) at:

- I-15 Freeway SB Ramps (EW) - #43
- I-15 Freeway NB Ramps (EW) - #44
- Riverside Avenue (EW) - #45

Highland Avenue (EW) - #48

Foothill Boulevard (EW) - #50

Alder Avenue (NS) at:

Baseline Avenue (EW) - #54

The Year 2035 With Project Buildout delay and Level of Service for the study area roadway network with improvements are shown in Table 19 of the project's TIA. Improvements presented in Table 19 include both funded improvements and any additional improvements needed to achieve acceptable Levels of Service during the peak hours. Year 2035 With Project Buildout (with improvements) delay calculation worksheets are provided in Appendix D of the project's TIA. As shown in Table 19, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2035 With Project Buildout traffic conditions and the project does not cause any significant impacts, with implementation of improvements included as mitigation below, assuming no high density residential uses are developed in Planning Area 24. However, due to the increased overall traffic generation associated with potential high density residential uses within Planning Area 24 (i.e., 4,302 additional daily vehicle trips, 46 less of which would occur during the morning peak hour and 219 more of which would occur during the evening peak hour), significant impacts to affected intersections could occur even with implementation of applicable mitigation measures. As such, intersection impacts under Year 2035 With Project Buildout conditions are considered significant and unavoidable.

(2) Congestion Management Program Facility Impacts

Threshold	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 and highways?

Impact 4.N-2 Implementation of the proposed project would not 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 and highways. With implementation of applicable mitigation measures and/or payment of fair-share contributions to necessary traffic system improvements, this impact is considered less than significant with mitigation.

As discussed previously, several thoroughfares including Baseline Avenue, Highland Avenue, Cherry Avenue, Citrus Avenue, and the I-15 and SR-210 freeways (and associated on- and off-ramps), are located within or at the border of the project site, and are CMP roadways. However, since the City of Fontana has a standard program (Circulation Development Fees) to fund regional improvements, SANBAG considers the City exempt from CMP traffic impact analysis. Nonetheless, as indicated above, all project-related impacts to study area intersections and roadway segments, including these CMP facilities, would be reduced to less than significant with implementation of applicable mitigation measures provided below, assuming no high density residential uses are developed within Planning Area 24. However, future development of high density residential uses within Planning Area 24, if it were to occur, would be required to contribute funds to the City as part of the Circulation Development Fee program, which would be applied to necessary regional

improvements, and thus no development-specific CMP traffic analysis is required by SANBAG. Therefore, CMP-related traffic impacts would be less than significant.

(3) Site Access and Traffic Safety

Threshold	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact 4.N-3 The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact is considered less than significant.

Potential future development associated with the proposed Specific Plan may require considerable construction and demolition. It may be necessary to completely restrict public access during brief periods of construction to ensure public safety. Appropriate signage would be provided as motorists/pedestrians approach the site to indicate access options. Construction vehicle traffic may create temporary congestion and safety hazards for local residents, on-site employees, motorists, and pedestrians. Potential safety hazards and traffic congestion would be reduced to less than significant levels through implementation of the standard construction safety measures, including use of flag men, signage and appropriate construction area fencing.

With regard to long-term project operation, the site circulation plans prepared for future on-site development projects would be subject to review and approval by the City of Fontana and Fontana Fire Protection District (FFPD)/San Bernardino County Fire Department (SBCFD), which would ensure that roadway and intersection designs meet appropriate requirements for site distance and implement appropriate control mechanisms. With review and approval of future development plans by the City of Fontana and FFPD/SBCFD, operational vehicular hazard impacts would be less than significant.

Overall, potential impacts related to safety hazards due to a design features or incompatible uses are considered less than significant.

(4) Parking

Threshold	Would the project result in inadequate parking capacity?

Impact 4.N-4 The proposed project would not result in inadequate parking capacity. With implementation of applicable mitigation measures, this impact is considered less than significant.

Chapter 4.0, *Development Regulations*, of proposed Specific Plan includes parking requirements for future development on-site, which generally relies on the parking standards contained in the FMC with various exceptions noted in the Specific Plan text. Overall, however, off-street parking would be provided for future on-site development in adequate quantity to meet the combined demands of proposed uses. Nonetheless, mitigation is provided below that would serve to ensure that adequate parking is provided for all future on-site development projects, such that no significant parking impacts would occur.

(5) Alternative Transportation

Threshold	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Impact 4.N-5 The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This impact is considered less than significant.

Public transit in the project area is provided by Omnitrans, as noted above. Public transit facilities, such as bus turnouts, shelters, and signage, would be provided for all future development projects on-site, to the satisfaction of affected public transit agencies. The development of future projects pursuant to the Specific Plan will increase demands on affected transit services and facilities, and such demands would be incrementally greater if residential uses were developed within Planning Area 24 given the potential for up to 1,000 additional housing units. However, vehicles, routes, and facilities are anticipated to be expanded to meet the growing needs of the community, funded by revenues from increased ridership.

As illustrated in Figure 2-15 in Chapter 2.0, *Project Description*, of this Draft EIR, the proposed Specific Plan includes extensive pedestrian and bicycle-related facilities, including Class I and Class II bike lanes, paseos, and a pedestrian bridge, which would serve to minimize safety hazards to pedestrians and bicyclists while maximizing non-vehicular transportation opportunities throughout and project area.

Given the provision of extensive improvements supportive of alternative transportation, subject to review and approval by the City of Fontana, County of San Bernardino, Omnitrans, and/or other affected agencies, the proposed project would not conflict with adopted policies, plans, or programs supporting public transit, bicycle, or pedestrian facilities, and as such impacts related to alternative transportation would be less than significant.

(6) Consistency with Regulatory Framework

As discussed above, implementation of the proposed Specific Plan would not result in significant impacts to the local and regional traffic system, including CMP facilities; thus, the project would be consistent with the CMP. It should be noted that significant and unavoidable impacts to local intersections could result from future development of additional R-4 residential uses within Planning Area 24 even with implementation of applicable mitigation measures. However, given the future projects' contributions to the City's Circulation Development Fee program, impacts to CMP facilities would be considered less than significant. In addition, as discussed in Section 4.I, *Land Use*, of this Draft EIR, the proposed project would be consistent with the applicable goals and policies of the SCAG RTP/SCS, the Fontana General Plan, and other relevant plans and guidance documents. With regard to the General Plan Circulation Element, the proposed project's consistency with the relevant goals and policies related to traffic and transportation is discussed below in **Table 4.N-1**, *General Plan Consistency Analysis*. As summarized in Table 4.N-1 and further discussed in Section 4.I of this Draft EIR, the proposed project would not conflict with the implementation of adopted transportation programs, plans, and policies. As such, impacts would be less than significant in this regard.

Table 4.N-1

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Goal #1: A balanced transportation system for Fontana is provided that meets the mobility needs of current and future residents and ensures the safe and efficient movements of vehicles, people and goods throughout the City.	
Policy 1-1: Plan for the provision of a variety of street classifications specifically designed to serve the various traffic needs in the area, including major highways, primary highways, secondary highways, collector streets, industrial collectors and local streets.	**Consistent.** As illustrated and discussed in Section 3.0, *Elements of the Specific Plan*, of the proposed Specific Plan, a wide range of roadway classifications are provided, consistent with the General Plan Circulation Element, to serve the ultimate development on-site.
Policy 1-2: Employ Access Management strategies for all types of development by utilizing the adopted Access Management criteria available through the office of the City Engineer. When existing conditions prohibit adherence to Access management requirements, deviations may be allowed at the discretion of the City Engineer or his/her designee.	**Consistent.** Access management balances the needs of adjacent property owners dependent upon access to the roadway with the needs of motorists using the roadway. Subject to the determination by the City that such access management is necessary for future development projects on-site, the proposed project would comply with this policy.
Policy 1-3: Design each arterial and its terminal facilities including parking with sufficient capacity to accommodate anticipated traffic based on intensity of projected and planned land use in the City and the region.	**Consistent.** Roadway cross-sections and intersection designs will be reviewed by City staff as part of the Specific Plan approval process to ensure consistency with City standards and have been designed to accommodate traffic levels at project buildout. The proposed project would be implemented over time and each development project within the Plan area would be subject to site plan review by the City, including whether adequate off-street parking is provided on-site.
Policy 1-4: Regulate the intensity of land uses to keep traffic on any arterial in balance with roadway capacity by requiring traffic studies to identify local roadway and intersection improvements necessary to mitigate their traffic impacts.	**Consistent.** The proposed Specific Plan provides all aspects of development within the project area, including proposed land uses and densities, as well as roads and other infrastructure necessary to support such land uses, taking into account the existing traffic system and other infrastructure in the area.
Policy 1-5: Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets and alleys for access to the development and its parking.	**Consistent.** Future development on-site pursuant to the proposed Specific Plan, subject to review and approval by the City, would minimize potential for "cut-through" local street and alley traffic.
Policy 1-6: Design, monitor traffic flow, and employ traffic control measures, including signalization, limiting access and access control, exclusive right and left turn-turn lanes, lane striping, and signage to ensure City streets and roads continue to function as required.	**Consistent.** Future development on-site would employ such traffic control measures, as necessary, in order to ensure that City streets and roads continue to function as required.
Policy 1-7: Provide for safe operations of all modes of transportation including auto, truck and bus traffic, passenger and freight rail service, pedestrians, bicycles,	**Consistent.** The proposed project includes a variety of on-site roadways, transit stops, and pedestrian and bicycle facilities to foster circulation of all types within

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
and other modes by adhering to national design and safety standards and uniform practices. Permitted driveways along arterials shall provide for turn-around or hammerhead turn in order to facilitate vehicle access to arterials. Vehicle or truck backing on to arterials is prohibited.	the project area. Further, the proposed project would not adversely affect the operation of truck or bus traffic, or impede passenger or freight rail service. Per to City requirements, permitted driveways along arterials would provide for turn-around or hammerhead turn in order to facilitate vehicle access to arterials, and vehicle or truck backing on to arterials would be prohibited.
Policy 1-8: Coordinate street system improvements and traffic signalization with regional transportation efforts in particular on roadways that are at the City's boundaries, are shared with neighboring jurisdictions, and/or are part of regionally significant corridors including those that are on Congestion Management Plan routes.	**Not Applicable.** The City will continue to coordinate with regional efforts regarding street system improvements and traffic signalization on roadways that are at the City's boundaries, are shared with neighboring jurisdictions, and/or are part of regionally significant corridors including those that are on Congestion Management Plan routes.
Policy 1-9: Coordinate arterial street design standards with neighboring jurisdictions within the City's sphere of influence to maintain and/or develop consistent street segments.	**Not Applicable.** The City will continue to coordinate arterial street design standards with neighboring jurisdictions within the City's sphere of influence to maintain and/or develop consistent street segments.
Policy 1-10: Cooperate with the City of Rancho Cucamonga to reconstruct the I-15 Freeway interchange at Baseline Avenue.	**Not Applicable.** The City will continue to cooperate with the City of Rancho Cucamonga to reconstruct the I-15 Freeway interchange at Baseline Avenue.
Policy 1-11: Plan for the design and construction of a new freeway interchange at the I-15 Freeway and Duncan Canyon Road.	**Consistent.** The proposed project would contribute to the design and construction of interchange improvements at this location for mitigation to address traffic system impacts under Year 2035 With Project Conditions.
Policy 1-12: All streets and intersections designed after the adoption of the General Plan will be planned to function at level of service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible.	**Consistent.** Proposed roadways have been designed to operate at an acceptable LOS at project buildout (i.e., LOS C or better).
Policy 1-13: Provide new bus turnouts along appropriate arterials based on and in coordination with, local and regional transit providers' bus routes and major stops.	**Consistent.** As required by the City, Omnitrans, or other transportation agencies, bus turnout would be provided on-site as needed.
Policy 1-14: Plan for the design and construction of new freeway interchange facilities on Interstate 10 at Alder Avenue and Beech Avenue.	**Not Applicable.** Implementation of the proposed project would not notably affect traffic levels at this location due to the distance from the project area, and therefore this policy is not applicable.

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Policy 1-15: Plan for the design and construction of new arterial over-crossings on Interstate 10 at Mulberry Avenue, Poplar Avenue and Cypress Avenue to provide for mobility, community connectivity and efficient access to safety vehicles.	**Not Applicable.** Implementation of the proposed project would not notably affect traffic levels at this location due to the distance from the project area, and therefore this policy is not applicable.
Policy 1-16: To provide for mobility, community connectivity plan for the design and construction of an arterial over-crossing on State Route 210 at Cypress Avenue.	**Not Applicable.** Implementation of the proposed project would not notably affect traffic levels at this location due to the distance from the project area, and therefore this policy is not applicable.
Policy 1-17: Cooperate with regional agencies and support planning and construction of the remaining segments of the State Route 210.	**Not Applicable.** The City will continue to cooperate with regional agencies and support planning and construction of the remaining segments of the State Route 210.
Policy 1-18: Maintain and improve intersection capacity by implementing ultimate intersection geometries through the use of left-turn pockets and dedicated right-turn lanes wherever feasible.	**Consistent.** Subject to review and approval by the City for future development on-site, the proposed project would implement ultimate intersection geometries through the use of left-turn pockets and dedicated right-turn lanes wherever feasible.
Policy 1-19: Prohibit parking, stopping, and limit driveway access to arterial roads in accordance with adopted access management strategies.	**Consistent.** Future development projects on-site would prohibit parking, stopping, and limit driveway access to arterial roads in accordance with adopted access management strategies.
Policy 1-20: Plan, design and construct streets in residential communities in accordance with uniform industry standards and practices to maintain appropriate traffic speeds and discourage through and by-pass traffic.	**Consistent.** Streets in residential communities on-site have been planned, designed and constructed in accordance with uniform industry standards and practices to maintain appropriate traffic speeds and discourage through and by-pass traffic.
Policy 1-21: Limit parking and residential driveway access to collector streets.	**Consistent.** Subject to the City's discretion during review of future development projects on-site, the proposed project would limit parking and residential driveway access to collector streets.
Policy 1-22: Whenever practical, prohibit surface drainage facilities and cross drains on new arterial roadways to maintain efficient vehicular flow.	**Consistent.** The proposed project does not include any surface drainage facilities on roadways within the Specific Plan area; rather, all drainage facilities would be underground, such that vehicular flow is not impeded.
Policy 1-23: Implement traffic signal systems and intelligent transportation systems (ITS) components (not limited to signal coordination, highway advisory radio, closed circuit television, emergency vehicle signal preemption, etc.) along arterial roadways and sub-areas, in accordance to the City's Traffic Signal System	**Consistent.** The proposed project would implement all necessary measures required by the City regarding traffic system controls for future development projects.

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Conceptual Buildout Plan and in compliance with regional and appropriate ITS Architecture Master Plans.	
Policy 1-24: Require street dedications from adjacent properties when the land is necessary for additional transportation capacity and enhanced mobility for the welfare of the community.	**Consistent.** While it is not anticipated that street dedications would be necessary on-site, as the roadway system has been designed for ultimate buildout of proposed uses, any future dedication requirements for future development would be determined by the City at the site plan review stage.
Policy 1-25: Require new streets to comply with adopted geometric standards for major, primary and secondary arterials at intersections.	**Consistent.** New streets within the Specific Plan area would comply with adopted geometric standards for major, primary and secondary arterials at intersections.
Policy 1-26: Protect levels of service on all parts of the Circulation Element through the use of medians, roundabouts, and other traffic calming measures.	**Consistent.** The proposed Specific Plan incorporates elements such as medians, roundabouts, and other traffic calming measures into the overall circulation design.
Policy 1-27: The City shall adopt and periodically update Street Design Guidelines outlining/identifying all street cross sections (standard and non-standard) and intersection cross sections within the City of Fontana. Street cross sections vary throughout the City as a result of adoption of specific plans, community plans, annexation of County areas, or as dictated by existing development constraints. These guidelines shall be maintained and updated at the discretion of the City Engineer.	**Consistent.** The proposed circulation system has been designed to be consistent with the City's Street Design Guidelines, subject to review and approval by the City.
Goal #2: A regional network of multi-modal transportation facilities including an improved citywide public transit system is provided that ensure the safe and efficient movement of vehicles, people and goods throughout the City of Fontana and to and from the region, and provides mobility to all City residents and helps reduce vehicular trips City-wide.	
Policy 2-1: Provide appropriate transportation terminal facilities for inter-city and regional travel by public and private transportation modes.	**Consistent.** While the responsibility for provision of terminal facilities lies with the City and/or regional transit agencies in the area, the proposed Specific Plan would not impeded or otherwise adversely affect the provision of such facilities.
Policy 2-2: Continue to support the regional bus system to provide intra-city service, inter-city service to major employment centers, and connection to other regional transportation transfer points.	**Consistent.** While the responsibility for provision of regional bus services lies with the transit agencies in the area, the proposed Specific Plan would not impeded or otherwise adversely affect such services.

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Policy 2-3: To encourage transit ridership and transportation demand management including carpooling, required vanpool parking spaces, plan for the provision of additional transportation centers to be used as a park-and-ride for ridesharing, high-occupancy vehicle lanes, regional bus and passenger rail services.	**Consistent.** Although the responsibility for provision of transit and alternative transportation services lies with the transit agencies in the area, the proposed Specific Plan would not impeded or otherwise adversely affect such services.
Policy 2-4: Continue to coordinate transit planning with the Southern California Association of Governments (SCAG), the San Bernardino Associated Governments (SANBAG), the Los Angeles County Metropolitan Transportation Authority (MTA), the Southern California Regional Rail Authority (Metrolink), Omnitrans and adjacent communities.	**Not Applicable.** The proposed Specific Plan would not have any effect on the City's continued coordination with regional agencies in transit planning.
Policy 2-5: Recognize alternative and private transportation services (vans, buses, shuttles, taxis and limousines) as an integral part of public transportation.	**Consistent.** The proposed project would utilize, as necessary, all forms of transportation including alternative and private transportation services.
Policy 2-6: Coordinate with local and regional human service agencies and public schools that provide mass transit services to reduce duplication of transportation services.	**Consistent.** As appropriate, future development on-site, including future elementary and high school facilities, would be coordinated with affected transit agencies to minimize duplication of services.
Policy 2-7: Where needed and appropriate, require new development to provide transit facilities and accommodations, such as bus shelters and turn-outs, consistent with regional agency plans and existing and anticipated demands.	**Consistent.** As deemed necessary by the City, Omnitrans, or other transit agencies, transit facilities and accommodations would be provided on-site to serve new development.
Policy 2-8: Ensure accessibility of disabled persons to public transportation facilities and services in accordance with all Americans with Disabilities Act (ADA) regulations.	**Consistent.** Per applicable access regulations, including ADA regulations, accessibility for disabled persons to public transportation facilities and services would be provided.
Policy 2-9: Encourage commuters and employers to reduce vehicular trips by offering incentives such as reduced price transit passes and preferential parking for ridesharing.	**Consistent.** To the extent required by the City, future development projects would offer incentives to reduce vehicle trips.
Policy 2-10: Investigate and implement new opportunities to further plan, develop and finance demand responsive transit service for the elderly, handicapped and recreational purposes.	**Not Applicable.** It is the responsibility of the City, Omnitrans, and other transit agencies to further plan, develop and finance demand-responsive transit services.

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Goal #3: A circulation system is provided that reduces conflicts between commercial trucking, private/public transportation and land uses.	
Policy 3-1: Provide designated truck routes for use by commercial trucking that minimize impacts on local traffic and neighborhoods.	**Consistent.** Trucks operating on-site in association with future construction or operation of proposed uses would be required to follow designated truck routes in the area as identified in Figure 4-2, *Designated Truck Routes*, in the General Plan Circulation Element.
Policy 3-2: Provide appropriately designed roadways for the designated truck routes including designated truck routes for large STAA trucks that can safely accommodate truck travel.	**Consistent.** Figure 4-2, *Designated Truck Routes*, in the General Plan Circulation Element identifies truck routes in the City that are designated as such because they have been appropriately designed and can safely accommodate truck travel.
Policy 3-3: Develop appropriate protection measures along truck routes to minimize noise impacts to sensitive land uses including but not limited to residences, hospitals, schools, parks, daycare facilities, libraries, and similar uses.	**Consistent.** To the extent feasible, the development of sensitive land uses along designated truck routes would be minimized, and where their proximity to truck routes cannot be avoided, appropriate protection measures would be developed and implemented to reduce noise impacts from truck traffic.
Policy 3-4: Encourage the development of adequate on-site loading areas to minimize interference of truck loading activities with efficient traffic circulation on adjacent roadways.	**Consistent.** Where appropriate for truck-dependent land uses, the Specific Plan allows for on-site loading areas to minimize interference of truck loading activities with efficient traffic circulation on adjacent roadways.
Goal #4: Rail facilities continue to develop while minimizing the impacts to land uses and arterial circulation.	
Policy 4-1: Work cooperatively with the railroad companies to maintain a safe and efficient rail system within the City.	**Consistent.** The Specific Plan area does not contain any railroad facilities and would not have any direct effects on rail operations within the City.
Policy 4-2: Establish connections between inter-city rail and major activity centers to improve freight transfers and provide passenger service.	**Consistent.** The Specific Plan area does not contain any railroad facilities and would not have any direct effects on rail operations within the City.
Policy 4-3: Develop safe and efficient design standards to minimize the impact of at-grade arterial railroad crossings.	**Consistent.** The Specific Plan area does not contain any railroad facilities and therefore would not require any improvements to at-grade arterial rail crossings.
Policy 4-4: Provide appropriate noise attenuation measures for new residential developments.	**Consistent.** Noise levels would be reduced, as necessary, to achieve acceptable noise standards at new residential developments on-site. Refer to Section 4.J, *Noise*, of this Draft EIR for a discussion of impacts and mitigation measures related to noise.

Table 4.N-1 (Continued)

General Plan Consistency Analysis

Fontana General Plan Circulation Element	
General Plan Goal/Policy	**Project Consistency Statement**
Policy 4-5: Work with regional agencies to identify the impacts of increased rail and freight traffic due to Alameda Corridor and Alameda Corridor East on traffic and circulation across corridor rail facilities and work towards implementation of appropriate circulation improvements.	**Not Applicable.** The coordination with regional agencies regarding increased rail and freight traffic is solely the responsibility of the City and other public agencies.

Source: PCR Services Corporation, 2014.

As is the case with the proposed project, each cumulative project would be subject to review and approval of project plans by the City of Fontana and Fontana Fire Protection District, as appropriate, to ensure adequate site distance for vehicles, as well as appropriate striping and signage. Therefore, it is anticipated that cumulative development projects would not result in safety hazards for vehicles in the area, and cumulative impacts would be less than significant. The project's contribution to this impact would not be cumulatively considerable.

Parking for future development projects under the cumulative growth scenario would be required to either provide off-street parking pursuant to either the FMC or an approved Specific Plan. In either case, future development projects would be required to provide parking in sufficient quantity that a parking deficiency does not occur, which would result in parking overflow or otherwise affect the parking availability for nearby land uses. As such, cumulative parking impacts would be less than significant, and the proposed project's contribution to this impact would not be cumulatively considerable.

As cumulative development occurs, public transit agencies are expected to respond by expanding their services and facilities to meet growing demands. It is also expected that cumulative development projects would also provide adequate public transit facilities, such as bus turnouts, shelters, and signage, to the satisfaction of affected transit agencies. Assuming public transportation keeps pace with demand based on market forces, as is expected, and pedestrian and bicycle facilities are provided concurrent with new development projects within the City (as required by FMC or Specific Plan development regulations), cumulative alternative transportation impacts would be less than significant, and the proposed project's contribution to this impact would not be cumulatively considerable.

As is the case with the proposed project, future cumulative development projects will be subject to review with regard to consistency with applicable plans, policies, and regulations. It is anticipated that such project review on a case-by-case basis will preclude the potential for adverse impacts resulting from conflicts with traffic-related regulations. The proposed project's contribution to this impact would not be cumulative considerable, and cumulative impacts would be less than significant in this regard.

4. CUMULATIVE IMPACTS

Traffic-related impacts are anticipated to occur within the region as cumulative development, including the four related Specific Plans in the project area, and overall buildout of the City's General Plan continues. The majority of the City is developed with urbanized uses, and the Westgate Specific Plan area is recognized as a major transportation hub, with relatively high amounts of traffic occurring in the project area due to the presence of large residential communities and proximity to the I-15 and SR-210 freeways. The impact analysis presented above provides an analysis for year 2035 buildout conditions, and thus serves to address both project-related and cumulative traffic impacts. In addition, as discussed above and in Chapter 3.0, *Basis for Cumulative Analysis*, of this Draft EIR, the average daily traffic volume forecasts for future conditions were determined using the growth increment approach for the San Bernardino Transportation Analysis Model Year 2008 and Year 2035 average daily traffic volume forecasts. This difference defines the growth in traffic over the 27-year period of Specific Plan buildout. The incremental growth in average daily traffic volume was factored to reflect the forecast growth between Year 2013 and Year 2035. For this reason, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2013 and Year 2035 is 22 years of the 27-year timeframe between 2008 and 2035, a factor of 0.81 (i.e., 22/27) was used, which accounts for ambient growth in the area over that period. Thus, the long-range forecast year 2035 with project scenario accounts for cumulative growth and development within the study area. Due to the conceptual nature of the future development within the Specific Plan area, future proposals could require individual assessments of potential impacts to traffic and circulation. As discussed above, without various traffic system improvements, implementation of the project would result in a number of roadway and intersection deficiencies. However, upon implementation of applicable mitigation, which include a range of new roadway construction, roadway widenings, signalizations, and intersection improvements, identified facilities would operate at a satisfactory LOS based on agency criteria. As such, since proposed mitigation measures would address project-related traffic under 2035 cumulative conditions, cumulative impacts would be less than significant and the proposed project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

a. Project Mitigation Summary

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Existing Plus Project, Year 2018, and Year 2035 traffic conditions. The improvements were determined through the operations analysis provided above. Interim roadway widening is required on Cherry Avenue from north of Sierra Lakes Parkway to Walnut Avenue for Year 2018 With Project conditions (see Table 12 of the project's TIA). The intersection improvements required to mitigate all project impacts are discussed in detail below.

The unsignalized intersections within the project study area were evaluated for traffic signals using the California Department of Transportation Warrant 3 Peak Hour traffic signal warrant analysis, as specified in the California *Manual on Uniform Traffic Control Devices*, dated January 2012. A summary of the traffic signal warrants is provided below in **Table 4.N-2**, *Traffic Signal Warrant Summary*.

Table 4.N-2

Traffic Signal Warrant Summary

Intersection	Existing Traffic Control[1]	Condition Traffic Signal Is First Warranted				
			Year 2018		Year 2035	
		Existing	Without Project	With Project	Without Project	With Project
Milliken Avenue (NS) at:						
SR-210 Freeway WB Ramps (EW) - #1	TS					
SR-210 Freeway EB Ramps (EW) - #2	TS					
Baseline Avenue (EW) - #3	TS					
Day Creek Boulevard (NS) at:						
SR-210 Freeway WB Ramps (EW) - #4	TS					
SR-210 Freeway EB Ramps (EW) - #5	TS					
I-15 Freeway SB Ramps (NS) at:						
Duncan Canyon Road (EW) - #6	n/a				Yes	
Beech Avenue (EW) - #7	TS					
Baseline Avenue (EW) - #8	TS					
Foothill Boulevard (EW) - #9	TS					
I-15 Freeway NB Ramps (NS) at:						
Duncan Canyon Road (EW) - #10	n/a				Yes	
Beech Avenue (EW) - #11	TS					
Baseline Avenue (EW) - #12	TS					
Foothill Boulevard (EW) - #13	TS					
Etiwanda Avenue (NS) at:						
Baseline Avenue (EW) - #14	TS					
West Heritage Circle (NS) at:						
Baseline Avenue (EW) - #15	TS					
East Heritage Circle (NS) at:						
Baseline Avenue (EW) - #16	TS					
Cherry Avenue (NS) at:						
Summit Avenue (EW) - #17	AWS					
Sierra Lakes Parkway (EW) - #18	CSS		Yes			
SR-210 Freeway WB Ramps (EW) - #19	TS					
SR-210 Freeway EB Ramps (EW) - #20	TS					
Highland Avenue (EW) - #21	AWS	Yes				
Victoria Street (EW) - #22	AWS	Yes				
Walnut Avenue (EW) - #23	CSS	Yes	Yes			
Baseline Avenue (EW) - #24	TS					
Foothill Boulevard (EW) - #25	TS					
Arrow Boulevard (EW) - #26	TS					
San Bernardino Avenue (EW) - #27	TS					
Valley Boulevard (EW) - #28	TS					
I-10 Freeway WB Ramps (EW) - #29	TS					
I-10 Freeway EB Ramps (EW) - #30	TS					
Summit Avenue (NS) at:						
Sierra Lakes Parkway (EW) - #31	n/a				Yes	

Table 4.N-2 (Continued)

Traffic Signal Warrant Summary

Intersection	Existing Traffic Control[1]	Condition Traffic Signal Is First Warranted				
			Year 2018		Year 2035	
		Existing	Without Project	With Project	Without Project	With Project
San Sevaine Road (NS) at:						
Summit Avenue (EW) - #32	AWS					Yes
Sierra Lakes Parkway (EW) - #33	AWS				Yes	
Highland Avenue (EW) - #34	AWS				Yes	
Walnut Avenue (EW) - #35	AWS					Yes
Beech Avenue (NS) at:						
Summit Avenue (EW) - #36	TS					
SR-210 Freeway Ramps (EW) - #37	CSS		Yes			
Lytle Creek Road (NS) at:						
Summit Avenue (EW) - #38	TS					
Citrus Avenue (NS) at:						
SR-210 Freeway WB Ramps (EW) - #39	TS					
SR-210 Freeway EB Ramps (EW) - #40	TS					
Highland Avenue (EW) - #41	TS					
Baseline Avenue (EW) - #42	TS					
Sierra Avenue (NS) at:						
I-15 Freeway SB Ramps (EW) - #43	AWS	Yes				
I-15 Freeway NB Ramps (EW) - #44	AWS	Yes				
Riverside Avenue (EW) - #45	AWS	Yes				
SR-210 Freeway WB Ramps (EW) - #46	TS					
SR-210 Freeway EB Ramps (EW) - #47	TS					
Highland Avenue (EW) - #48	TS					
Baseline Avenue (EW) - #49	TS					
Foothill Boulevard (EW) - #50	TS					
Arrow Boulevard (EW) - #51	TS					
Alder Avenue (NS) at:						
SR-210 Freeway WB Ramps (EW) - #52	TS					
SR-210 Freeway EB Ramps (EW) - #53	TS					
Baseline Avenue (EW) - #54	TS					

Source: Kunzman Associates, Inc. 2013

b. Recommended Mitigation Measures

The recommended mitigation measures in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements. Although the majority of these proposed improvements would be located within the City of Fontana, some of them are located outside of the City's jurisdiction in the Cities of Rialto and Rancho Cucamonga, in unincorporated San Bernardino County, or are State highway facilities under the jurisdiction of Caltrans. While such mitigation measures located outside the City of Fontana's jurisdiction would address project-related and cumulative traffic system impacts, the City of Fontana cannot compel other affected jurisdictions to implement these improvements. However, the project applicant would be required to pay "fair share" contributions to address the proposed project's proportion of traffic impacts at each facility, as summarized in Table 21 of the project's TIA.

(1) Intersection Improvements

The intersection improvements required to mitigate all project impacts are summarized below in **Table** 4.N-3, *Summary of Intersection Improvements*.

(2) On-Site Roadway Segment Improvements

On-site roadway segment improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 78 of the project's TIA). Figures 79 and 80 of the project's TIA show the City of Fontana General Plan roadway cross-sections and the Westgate Specific Plan roadway cross-sections, respectively, that are referenced in Figure 78.

Mitigation Measure N-1: Construct Heritage Circle from Victoria Avenue to Baseline Avenue at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-2: Construct Cherry Avenue from the I-15 Freeway to Walnut Avenue/Victoria Street at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct Cherry Avenue from Walnut Avenue/Victoria Street to Baseline Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-2a: Within five (5) years from the Certificate of Occupancy of any future warehouse in PA 41, the Developer will, subject to eligible fee credits for the construction of master infrastructure improvements, complete construction of Cherry Avenue from the I-15 Freeway to Walnut Avenue/Victoria Street at its ultimate cross-section width, including the median, landscaping and parkway improvements as well as the completion of construction of Cherry Avenue from Walnut Avenue/Victoria Street to Baseline Avenue at its ultimate half-section section width, including the remaining portion of the median, landscaping and parkway improvements.

Table 4.N-3

Summary of Intersection Improvements

Intersection	Improvement	Improvement Required for Scenario: Existing Plus Project Phase 1	Existing Plus Project Buildout	Year 2018 With Project Phase 1	Year 2035 With Project Buildout
I-15 Freeway SB Ramps (NS) at:					
Duncan Canyon Road (EW) - #6	Construct Diamond Interchange				Yes
Beech Avenue (EW) - #7	Widen SB Off Ramp		Yes		Yes
	Construct Additional EB Left Turn Lane				Yes
I-15 Freeway NB Ramps (NS) at:					
Duncan Canyon Road (EW) - #10	Construct Diamond Interchange				Yes
Beech Avenue (EW) - #11	Widen NB Off Ramp				Yes
Baseline Avenue (EW) - #12	Widen NB Off Ramp				Yes
	Construct Additional EB Left Turn Lane		Yes		Yes
	Construct Additional WB Thru Lane				Yes
Foothill Boulevard (EW) - #13	Widen NB Off Ramp				Yes
Heritage Circle (West) (NS) at:					
Baseline Avenue (EW) - #15	Restripe SB Thru/Right Turn Lane To Right Turn Lane W/ Overlap				Yes
	Construct Additional EB Left Turn Lane		Yes		Yes
Heritage Circle (East) (NS) at:					
Baseline Avenue (EW) - #16	Restripe NB Left Turn Lane To Thru Lane				Yes
	Construct SB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct SB Thru/Right Turn Lane	Yes	Yes	Yes	Yes
	Provide EB Left Turn Lane	Yes	Yes	Yes	Yes
	Modify Traffic Signal	Yes	Yes	Yes	Yes
Cherry Avenue (NS) at:					
Sierra Lakes Parkway (EW) - #18	Construct NB Left Turn Lane		Yes		Yes
	Construct Additional NB Thru Lane	Yes	Yes	Yes	
	Provide NB Right Turn Overlap				Yes
	Construct SB Left Turn Lane	Yes	Yes	Yes	
	Construct Additional SB Thru Lane	Yes	Yes	Yes	Yes
	Construct EB Left Turn Lane		Yes		Yes

Table 4.N-3 (Continued)

Summary of Intersection Improvements

Intersection	Improvement	Improvement Required for Scenario: Existing Plus Project Phase 1	Existing Plus Project Buildout	Year 2018 With Project Phase 1	Year 2035 With Project Buildout
	Construct EB Thru/Right Turn Lane		Yes		Yes
	Construct Additional WB Left Turn Lane				Yes
	Install Traffic Signal	Yes	Yes	Yes	Yes
SR-210 Freeway WB Ramps (EW) - #19	Widen WB Off Ramp				Yes
Highland Avenue (EW) - #21	Construct NB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct Additional NB Thru Lane		Yes		Yes
	Provide NB Right Turn Lane Overlap				Yes
	Construct SB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct Additional SB Left Turn Lane				Yes
	Construct SB Thru/Right Turn Lane				Yes
	Construct EB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct EB Thru/Right Turn Lane	Yes	Yes	Yes	Yes
	Restripe WB Thru/Right Turn Lane to Thru/Left Turn				Yes
	Construct WB Right Turn Lane		Yes		Yes
	Install Traffic Signal	Yes	Yes	Yes	Yes
Walnut Avenue/Victoria Street (EW) - #23	Construct NB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct Additional NB Left Turn Lane		Yes		Yes
	Construct Additional NB Thru Lane	Yes	Yes	Yes	
	Construct Two Additional NB Thru Lanes				Yes
	Construct Additional SB Thru Lane				Yes
	Construct SB Right Turn Lane W/Overlap	Yes	Yes		
	Construct SB Free Right Turn Lane		Yes		Yes
	Construct EB Left Turn Lane	Yes	Yes	Yes	Yes
	Construct Additional EB Left Turn Lane		Yes		Yes
	Construct EB Thru/Right Turn Lane	Yes	Yes	Yes	Yes
	Install Traffic Signal	Yes	Yes	Yes	Yes

Table 4.N-3 (Continued)

Summary of Intersection Improvements

Intersection	Improvement	Improvement Required for Scenario: Existing Plus Project Phase 1	Existing Plus Project Buildout	Year 2018 With Project Phase 1	Year 2035 With Project Buildout
Baseline Avenue (EW) - #24	Provide NB Right Turn Overlap				Yes
	Provide SB Right Turn Overlap				Yes
	Provide EB Right Turn Overlap				Yes
	Provide WB Right Turn Overlap				Yes
Foothill Boulevard (EW) - #25	Construct Additional NB Thru Lane				Yes
	Construct NB Right Turn Lane				Yes
	Construct Additional EB Thru Lane				Yes
	Provide EB Right Turn Overlap				Yes
Arrow Boulevard (EW) - #26	Construct NB Right Turn Lane				Yes
	Construct Additional EB Thru Lane				Yes
San Bernardino Avenue (EW) - #27	Construct Additional EB Left Turn Lane	Yes	Yes	Yes	Yes
Valley Boulevard (EW) - #28	Construct Additional SB Thru Lane				Yes
	Construct Additional WB Left Turn Lane				Yes
I-10 Freeway WB Ramps (EW) - #29	Construct Diamond Interchange	Yes	Yes	Yes	Yes
I-10 Freeway EB Ramps (EW) - #30	Construct Diamond Interchange	Yes	Yes	Yes	Yes
Summit Avenue (NS) at:					
Sierra Lakes Parkway (EW) - #31	Construct NB Left Turn Lane		Yes		Yes
	Construct NB Thru/Right Turn Lane		Yes		Yes
	Construct SB Left Turn Lane		Yes		Yes
	Construct SB Thru/Right Turn Lane		Yes		Yes
	Construct EB Left Turn Lane		Yes		Yes
	Construct Additional EB Thru Lane		Yes		Yes
	Construct WB Left Turn Lane		Yes		Yes
	Construct Additional WB Thru Lane		Yes		Yes
	Install Traffic Signal		Yes		Yes
San Sevaine Road (NS) at:					
Summit Avenue (EW) - #32	Restripe EB Right Turn Lane to Thru/Right Turn Lane		Yes		Yes

Table 4.N-3 (Continued)

Summary of Intersection Improvements

Intersection	Improvement	Improvement Required for Scenario: Existing Plus Project Phase 1	Existing Plus Project Buildout	Year 2018 With Project Phase 1	Year 2035 With Project Buildout
	Restripe WB Right Turn Lane to Thru/Right Turn Lane		Yes		Yes
	Install Traffic Signal		Yes		Yes
Sierra Lakes Parkway (EW) - #33	Construct Roundabout		Yes		Yes
Highland Avenue (EW) - #34	Install Traffic Signal		Yes		Yes
Walnut Avenue (EW) - #35	Construct NB Left Turn Lane		Yes		Yes
	Construct SB Left Turn Lane		Yes		Yes
	Install Traffic Signal		Yes		Yes
Beech Avenue (NS) at:					
Summit Avenue (EW) - #36	Provide NB Right Turn Overlap		Yes		Yes
	Provide SB Right Turn Overlap		Yes		Yes
	Modify Traffic Signal Phasing		Yes		Yes
SR-210 Freeway Ramps (EW) - #37	Install Traffic Signal	Yes	Yes	Yes	Yes
Citrus Avenue (NS) at:					
Baseline Avenue (EW) - #42	Construct Additional SB Left Turn Lane				Yes
	Provide SB Right Turn Overlap				Yes
Sierra Avenue (NS) at:					
I-15 Freeway SB Ramps (EW) - #43	Construct Additional SB Thru Lane				Yes
	Install Traffic Signal	Yes	Yes	Yes	Yes
I-15 Freeway NB Ramps (EW) - #44	Install Traffic Signal	Yes	Yes	Yes	Yes
Riverside Avenue (EW) - #45	Construct NB Left Turn Lane				Yes
	Construct Additional NB Thru Lane				Yes
	Construct EB Left Turn Lane				Yes
	Construct EB Thru/Right Turn Lane				Yes
	Construct WB Thru Lane				Yes
	Provide WB Right Turn Overlap				Yes
	Install Traffic Signal	Yes	Yes	Yes	Yes
Highland Avenue (EW) - #48	Provide Additional SB Thru Lane (Restripe)				Yes

Table 4.N-3 (Continued)

Summary of Intersection Improvements

Intersection	Improvement	Improvement Required for Scenario: Existing Plus Project Phase 1	Existing Plus Project Buildout	Year 2018 With Project Phase 1	Year 2035 With Project Buildout
Foothill Boulevard (EW) - #50	Construct Additional EB Thru Lane				Yes
	Construct Additional WB Thru Lane				Yes
Alder Avenue (NS) at:					
Baseline Avenue (EW) - #54	Construct Additional NB Thru Lane				Yes
	Construct Additional SB Thru Lane				Yes
	Construct Additional EB Thru Lane				Yes
	Construct Additional WB Thru Lane		Yes		Yes

Source: Kunzman Associates, Inc. 2013

Mitigation Measure N-3: Construct Summit Avenue from San Sevaine Road to Sierra Lakes Parkway at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct Summit Avenue from its western project boundary to Lytle Creek Road at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-4: Construct San Sevaine Road from Summit Avenue to the northern boundary of Planning Area 21 and from Sierra Lakes Parkway to Walnut Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development. Construct San Sevaine Road from the northern boundary of Planning Area 21 to Sierra Lakes Parkway at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-5: Construct Lytle Creek Road from its northern project boundary to Summit Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-6: Construct Sierra Lakes Parkway from Cherry Avenue to San Sevaine Road at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development. Construct Sierra Lakes Parkway from San Sevaine Road to its eastern project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-7: Construct Highland Avenue from Victoria Street to San Sevaine Road at its ultimate cross-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-8: Construct Victoria Avenue from the I-15 Freeway to Cherry Avenue at is ultimate cross-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-9: Construct Walnut Avenue from Cherry Avenue to San Sevaine Road at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

Mitigation Measure N-10: Construct Baseline Avenue from its western project boundary to Cherry Avenue at its ultimate half-section width including landscaping and parkway improvements in conjunction with development.

(3) Intersection Improvements

Mitigation Measure N-11: Necessary intersection improvement recommendations and proposed phasing of each improvement, which are summarized above in Table 4.N-3 shall be implemented as necessary to address potential project-related traffic impacts. As is the case for any roadway design, the City of Fontana shall periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory. The phasing of improvements is summarized in Table 4.N-3. The project shall provide on-site roadways to connect to the existing infrastructure in conjunction with development and consistent with the alignment plan.

(4) Traffic-Related Hazards

Mitigation Measure N-12: Sight distance at the each project access shall be reviewed with respect to the California Department of Transportation/City of Fontana standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

Mitigation Measure N-13: On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project.

(5) Parking

Mitigation Measure N-14: Each future development within the Specific Plan boundaries shall provide sufficient parking spaces to meet City of Fontana parking code requirements in order to service on-site parking demand.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of applicable mitigation measures provided above, and assuming no residential development within Planning Area 24, the proposed project would result in less than significant traffic- and parking-related impacts. However, given the substantial increase in traffic generation associated with the provision of additional high density residential uses within Planning Area 24, significant impacts to local intersections could occur even with implementation of applicable mitigation measures. As such, despite incorporation of all feasible mitigation, impacts to intersections would be considered significant and unavoidable.

Therefore, if the City of Fontana approves the project, the City shall be required to cite their findings in accordance with Section 15091 of the *CEQA Guidelines* and prepare a Statement of Overriding Considerations in accordance with Section 15093 of the *CEQA Guidelines*.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
O. UTILITIES AND SERVICE SYSTEMS
1. WATER SUPPLY

1. INTRODUCTION

This section addresses water demand associated with the proposed project and assesses the adequacy of water supply and infrastructure capacity to meet that demand. The proposed project's consistency with relevant plans and regulations is also discussed. The focus of this section is water consumption for domestic uses. The following analysis is based in part on Water Supply Assessments (WSAs) prepared for the project by Fontana Water Company (FWC) and Cucamonga Valley Water District (CVWD) in January 2014 and July 2012, respectively, which are contained in Appendix K of this Draft EIR, as well as the *Westgate Specific Plan Infrastructure Study*, prepared by Hall & Foreman, Inc. in January 2011, which is included as Appendix L to this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

The project site is located within the service areas of two water purveyors, Fontana Water Company (east of Cherry Avenue) and Cucamonga Valley Water District (west of Cherry Avenue). The following discusses the current water supply conditions for each of these agencies as well as a discussion of water infrastructure serving the project area.

(1) Fontana Water Company

(a) Fontana Water Company Historical Water Supplies

Fontana Water Company (FWC) is a public utility water company subject to the regulatory jurisdiction of the California Public Utilities Commission (CPUC). FWC provides public utility water service in most of the City of Fontana and in portions of the cities of Rialto and Rancho Cucamonga, and in adjoining unincorporated areas of San Bernardino County. FWC's CPUC-authorized certificated service area encompasses approximately 52 square miles bordered generally by the Riverside County line on the south, Etiwanda and Cherry Avenues on the west, Lytle Creek Wash and Linden Avenue on the east, and Highland and Summit Avenues on the north.

FWC currently derives its water supply from 33 active groundwater production wells and a surface water treatment plant, the Sandhill Water Treatment Plant. The water supply is produced from groundwater wells in the Chino Basin, Rialto Basin, Lytle Basin, and the No-Man's Land Basin (an unnamed basin between the Chino Basin and the Rialto Basin), and surface water from Lytle Creek. FWC also receives untreated State Water Project (SWP) water from the Inland Empire Utilities Agency (IEUA) and San Bernardino Valley Municipal Water District (SBVMWD), which is treated at FWC's Sandhill Water Treatment Plant. FWC receives well water, local surface water, imported water, or a combination of those sources at various points in its water distribution system.

FWC's water rights, most of which are held by Fontana Union Water Company (Fontana Union), are subject to FWC's irrevocable right to utilize, pursuant to court-approved agreements with CVWD and Fontana Union, of which FWC is a principal shareholder. Historical annual water supplies utilized by FWC are summarized below in **Table 4.O.1-1**, *Historical Annual Water Supply Production by Fontana Water Company (AFY)*. The data show historical annual water supply production increases in response to increasing demands. As shown in Table 4.O.1-1, annual water supply production increased between 1988 (26,439 acre-feet [AF] – an acre-foot is the volume of water contained in an area one acre in size with a depth of one foot, or approximately 325,853 gallons) and 2010 (41,869 AF), though during that 23-year period, overall average production reached as high as 49,879 AF (during 2007).

Table 4.O.1-1

Historical Annual Water Supply Production by Fontana Water Company (AFY)

	Groundwater							
Year	Lytle Basin	Chino Basin	Rialto Basin	No-Man's Land	Subtotal	Imported Water	Lytle Creek	Total
1988	8,305	8,605	501	1,230	18,641		7,798	26,439
1989	6,493	14,185	2,328	1,279	24,285		5,078	29,363
1990	6,797	15,203	3,206	1,426	26,632		4,262	30,894
1991	5,049	12,602	3,555	837	22,043		6,443	28,486
1992	6,666	7,328	2,614	1,061	17,669		11,997	29,666
1993	8,178	10,741	2,320	1,447	22,686		8,906	31,592
1994	9,607	7,102	2,171	1,261	20,141		13,424	33,565
1995	8,366	8,609	2,111	2,235	21,321		11,286	32,608
1996	11,726	11,319	2,271	3,137	28,453		7,543	35,997
1997	11,950	14,852	2,596	904	30,302		6,829	37,131
1998	9,728	11,054	2,891	0	23,673		11,342	35,015
1999	15,540	17,175	2,935	0	35,650		5,734	41,385
2000	13,236	20,555	3,552	2,289	39,631		4,155	43,786
2001	8,869	18,766	6,106	3,123	36,864		6,235	43,098
2002	7,520	23,060	9,452	3,135	43,166	933	2,048	46,147
2003	6,029	22,110	9,321	3,783	41,243	2,040	3,502	46,785
2004	5,664	24,718	8,173	3,930	42,485	2,530	4,484	49,498
2005	11,424	18,499	7,252	3,550	40,726	520	6,352	47,597
2006	12,593	14,747	5,695	3,683	36,718	640	11,999	49,356
2007	15,021	19,622	7,325	3,930	45,899	0	3,980	49,879
2008	10,523	16,192	6,312	4,165	37,191	2,765	7,613	47,569
2009	7,789	14,490	8,480	4,293	35,051	3,923	5,390	44,363
2010	7,073	9,921	7,782	4,421	29,197	1,099	11,473	41,769

Notes: AFY = acre-feet per year

Source: Fontana Water Company, 2014.

(b) Fontana Water Company Water Supplies and Water Rights

(i) Chino Basin

The Chino Basin is FWC's largest and most reliable groundwater source. During the last 23 years, FWC's production from the Chino Basin ranged from approximately 7,102 acre-feet per year (AFY) to 24,718 AFY, which in most years, accounts for a significant portion of FWC's total water supply.

The Chino Basin, in San Bernardino County, is the largest groundwater basin in the Upper Santa Ana River Watershed. The Chino Basin is bounded by the Rialto-Colton, Chino, San Jose, and Cucamonga faults, and by Puente Hills and the San Gabriel Mountains. The total surface area of the basin is approximately 154,000 acres (240 square miles). The Chino Basin currently has over five million AF of water in storage, with an additional unused storage capacity (based on historical water levels in the basin) of about one million AF. Over the past ten years, total groundwater production from the basin has ranged from approximately 114,500 AFY to 181,700 AFY. A majority of production is pumped for municipal and industrial purposes and the remaining production is pumped by 300 to 400 agricultural producers.

The Chino Basin was adjudicated under the Chino Basin Judgment, entered on January 27, 1978 by the Superior Court for the County of San Bernardino. FWC is a party to the Chino Basin Judgment and is classified as an appropriator. The Chino Basin Judgment established an average Safe Yield in the Chino Basin of 140,000 AFY (from July 1 to June 30). The Safe Yield is defined in the Chino Basin Judgment as "the long-term average annual quantity of ground water (excluding replenishment of stored water but including return flow to the Basin from use of replenishment or stored water) which can be produced from the Chino Basin under conditions of a particular year without causing an undesirable result." The 1978 Chino Basin Judgment's allocation of the Safe Yield of the Chino Basin includes three separate Pools: the "Overlying Agricultural Pool (82,800 AFY)", the "Overlying Non-Agricultural Pool (7,366 AFY)", and the "Appropriative Pool (49,834 AFY)". FWC's appropriative rights together with those of Fontana Union (of which FWC is a principal shareholder) amount to an approximately 12-percent share of the Safe Yield. **Table 4.O.1-2**, *Historical Chino Basin Production by Pool (AF)*, below, presents the historical Chino Basin production by Pool.

Appropriators who are parties to the Chino Basin Judgment, such as FWC, are authorized to produce groundwater in addition to their allocated quantities. Appropriators pay assessments for such production to the Chino Basin Watermaster. The assessments are used to replenish the basin, through imported surface water recharge. The Chino Basin Watermaster purchases water to replenish the Chino Basin from MWD through IEUA. Future additional supplemental sources of replenishment water are expected to come from recycled water and from increased recharge of local storm water.

In addition, the Chino Basin Watermaster reallocates the unused portion of the Chino Basin safe yield from the Overlying Agricultural Pool to the Appropriative Pool members as a supplement to the Appropriative Pool share of Operating Safe Yield rights in any year. These transfers are permanent if agricultural land has been converted to non-agricultural use, or temporary if agricultural pool extractions are less than their share of the safe yield. Over the past 10 years, the total portion of the annual Agricultural Pool reallocated to Appropriative Pool members has ranged from 40,822 AFY to 50,945 AFY, with an average of approximately 46,115 AFY. As agricultural production declines within the Chino Basin, the reallocation of water to the Appropriative Pool will increase.

Table 4.O.1-2

Historical Chino Basin Production by Pool (AF)[a]

Fiscal Year	Appropriative Pool	Overlying Agricultural Pool	Overlying Non-Agricultural Pool	Total
1974-75	70,312	96,567	8,878	175,757
1975-76	79,312	95,349	6,356	181,017
1976-77	72,707	91,450	9,198	173,355
1977-78	60,659	83,934	10,082	154,675
1978-79	60,597	73,688	7,127	141,412
1979-80	63,834	69,369	7,363	140,566
1980-81	70,726	68,040	5,650	144,416
1981-82	66,731	65,117	5,684	137,532
1982-83	63,481	56,759	2,395	122,635
1983-84	70,558	59,033	3,208	132,799
1984-85	76,912	55,543	2,415	134,870
1985-86	80,859	52,061	3,193	136,113
1986-87	84,662	59,847	2,559	147,068
1987-88	91,579	57,865	2,958	152,402
1988-89	93,617	46,762	3,619	143,998
1989-90	101,344	48,420	4,856	154,620
1990-91	86,658	48,085	5,407	140,150
1991-92	91,982	44,682	5,240	141,904
1992-93	86,367	44,092	5,464	135,923
1993-94	80,798	44,298	4,586	129,682
1994-95	93,419	55,022	4,327	152,768
1995-96	101,606	43,639	5,424	150,669
1996-97	110,163	44,809	6,309	161,281
1997-98	97,435	43,345	4,955	145,735
1998-99	107,723	47,538	7,006	162,267
1999-00	126,645	44,401	7,774	178,820
2000-01	113,437	39,954	8,084	161,475
2001-02	121,489	39,494	5,548	166,531
2002-03	120,557	38,487	4,853	163,897
2003-04	136,834	41,978	2,915	181,727
2004-05	127,811	34,450	2,327	164,588
2005-06	124,315	33,900	3,026	161,241
2006-07	130,826	37,295	3,369	171,491
2007-08	103,078	30,910	3,440	137,427
2008-09	84,716	32,143	4,394	121,253
2009-10	78,733	31,855	3,908	114,496

Source: Fontana Water Company, 2014.

(ii) Lytle Creek Region

FWC produces water from the Lytle Creek Region that consists of surface water from Lytle Creek and groundwater from Lytle Basin. The Lytle Creek Watershed is approximately 46.4 square miles in size, while the area of the Lytle Basin is approximately 22.3 square miles. Lytle Creek is located in the Lytle Creek Watershed which originates in the vicinity of Mount San Antonio in the San Bernardino National Forest and includes the Upper Santa Ana River Basin located in San Bernardino County. Lytle Creek includes the North Fork Lytle Creek, Middle Fork Lytle Creek, and South Fork Lytle Creek, each flowing eastward. Water from Lytle Creek is diverted by Southern California Edison to generate electricity from two hydroelectric power plants in the Lytle Creek Region. Following the power generation, Lytle Creek water is diverted to FWC's Afterbay where it is shared with other water purveyors pursuant to agreements. FWC's share is then diverted to FWC's Sandhill Water Treatment Plant where it is treated for domestic water use within FWC's distribution system. In addition to Lytle Creek surface flows, FWC obtains water from the Grapeland Tunnel, which is a groundwater infiltration system with extensive collector lines in Lytle Creek Canyon tributaries and a large line running below the streambed of Lytle Creek. Water from the Grapeland Tunnel historically has flowed through a large transmission pipeline directly into FWC's water system. Also it can be combined with the Lytle Creek stream flow to the Afterbay and the Sandhill Water Treatment Plant.

The 1897 McKinley Decree, which specifies surface water allocations, and the January 28, 1924 Judgment by the Superior Court for the County of San Bernardino, which confirms the McKinley Decree and specifies allowed groundwater diversions, allow Fontana Union and FWC to divert surface water and pump groundwater from the Lytle Creek Region up to a maximum of 3,480.78 miner's inches, or 69.6 cubic feet per second (approximately 50,400 AFY). The amount includes up to 2,500 miner's inches, (approximately 36,200 AFY) of allowable combined surface and groundwater extractions to augment deficiencies in surface water diversions. FWC is allowed to extract and divert a combined 1,300 miner's inches, or 26 cubic feet per second (approximately 18,800 AFY) of groundwater from the Lytle Creek Region. The Lytle Basin is managed by the Lytle Creek Water Conservation Association, which is made up of the successors to the parties of the 1897 McKinley Decree and the 1924 Judgment. FWC's diversion and production of water from the Lytle Creek Region can vary due to fluctuations in rainfall, snowpack and runoff, especially during dry years.

(iii) Rialto Basin

The Rialto Basin underlies a portion of the Upper Santa Ana Valley in southwestern San Bernardino County and northwestern Riverside County. The Rialto Basin is about 10 miles long and varies in width from about 3.5 miles in the northwestern part to about 1.5 miles in the southeastern part. The Rialto Basin is bounded by the San Gabriel Mountains on the northwest, the San Jacinto fault on the northeast, the Badlands on the southeast, and mostly by the Chino Basin on the southwest.

Under the December 22, 1961 Rialto Basin Court Decree, FWC, by virtue of its shareholdings in Fontana Union, is entitled to produce water from the Rialto Basin with no extraction limit in most years. Parties to the Rialto Basin Decree, including FWC, are authorized to pump from the Rialto Basin without restriction, except during certain months (between March and May) in some water years (October 1 to September 30) when pumping may be limited based on groundwater elevations for three specific "index" wells (Duncan Well, Willow Street Well, and Boyd Well).

In addition to its irrevocable right to pump water pursuant to rights held by Fontana Union, FWC can pump an additional 1,600 acre feet of water from the Rialto Basin during any period of pumping limitation, pursuant to a long-term water rights lease with the City of Rialto.

(iv) No-Man's Land Basin

FWC and Fontana Union hold senior appropriative pumping rights, which entitle them to produce groundwater from the No-Man's Land Basin. This basin is located between the Rialto and Chino Basins and is hydrogeologically separate from them. Water production from this basin is not a part of either the Chino Basin Judgment or the Rialto Basin Decree and is not subject to adjudicated production limitations or assessments. Groundwater pumping rights in the No-Man's Land Basin are governed by contractual arrangements approved by the U.S. Bankruptcy Court-confirmed Plan of Reorganization for Fontana Union which affects Fontana Union, FWC, CVWD, the City of Rialto, West Valley Water District, and other parties.

(v) Inland Empire Utilities Agency

IEUA, originally known as Chino Basin Municipal Water District, was formed by popular vote of its residents in June 1950, to become a member agency of MWD for the purpose of importing supplemental water to augment local stream and groundwater supplies. Since its formation in 1950, IEUA has significantly expanded its services. These include production of recycled water, wholesaling of untreated imported water and recycled water supplies, sewage treatment, co-composting of manure and municipal biosolids, desalinization of groundwater supplies and disposal of non-reclaimable industrial wastewater and brine. IEUA does not provide treated MWD water to retail water purveyors in its service area.

FWC is located within IEUA's service area. FWC has upgraded (including construction of conventional pretreatment facilities and capacity expansion) its existing surface water treatment plant (the Sandhill Water Treatment Plant) to treat SWP water from IEUA and SBVMWD, in addition to surface water from Lytle Creek. The Sandhill Water Treatment Plant upgrades increased the plant's capacity from less than an intermittent 17 million gallons per day (mgd) to 29 mgd. FWC has the facilities and capacity to receive up to 40 cubic feet per second (cfs) of untreated imported SWP water from IEUA and 14 cfs of untreated imported SWP water from SBVMWD. IEUA's water management goals and implementation strategies, such as its imported water distribution policy, groundwater banking, conjunctive use programs, and use of recycled water, enhances the reliability of water supplies utilized by FWC. The following discussion of water sources, future water demands, and future water supplies in IEUA's service area illustrates that sufficient water is available for FWC and the other purveyors within IEUA's service area in the future.

IEUA wholesales untreated water and provides industrial/municipal wastewater collection and treatment services, and other related services for the western portion of San Bernardino County. IEUA's service area is located in the southwestern section of San Bernardino County. The 242-square-mile service area, which encompasses the Chino Groundwater Basin, consists of a relatively flat alluvial valley from east to west which slopes downward from north to south at a one- to two-percent grade.

IEUA's service area includes the cities of Fontana, Chino, Chino Hills, Montclair, Pomona, Ontario, Rancho Cucamonga and Upland. Approximately 849,000 people resided in IEUA's service area as of 2010. IEUA's service area lies almost entirely within the Chino Groundwater Basin.

Water used in IEUA's service area comes from both local and imported sources. Local sources include local groundwater, surface water and, most recently, recycled water. IEUA purchases untreated imported water from MWD for wholesale redistribution to local retail water purveyors within its service area, including FWC. The local retail water purveyors must first treat the imported MWD water before delivery to their potable water customers.

According to IEUA's 2010 Urban Water Management Plan (UWMP), total local groundwater production by FWC and other local retail water agencies in IEUA's service area ranged from approximately 110,000 to 146,000 AFY from 2000 to 2010. These figures include production from the Chino Basin as well as the other local groundwater sources.

FWC and a number of other retail water agencies in IEUA's service area that produce groundwater from the Chino Basin also obtain a portion of their water from local surface sources. The principal sources of surface water include Lytle Creek, San Antonio Canyon, Cucamonga Canyon, Day Creek, Deer Creek, and several smaller surface streams. According to IEUA's 2010 UWMP, production from all such local surface supplies ranged from approximately 8,900 to 25,700 AFY from 2000 to 2010.

FWC has capacity to receive up to 40 cfs of MWD imported SWP water from IEUA for treatment at FWC's existing Sandhill Water Treatment Plant. Full-service imported water deliveries from MWD to IEUA have increased significantly in the past twenty years from approximately 20,016 AF of water in fiscal year 1990-91 to a peak of approximately 81,616 AF in fiscal year 2008-09. Additional imported water supplies from IEUA are used for groundwater replenishment thereby augmenting the annual yield and production from the Chino Basin.

Water recycling involves treatment of wastewater to create a high-quality, safe source of water for landscape irrigation, industrial uses, and groundwater recharge. Recycled water is a critical component of the Optimum Basin Management Plan developed by the Chino Basin Watermaster in 2000 to address water supply and quality issues in the Chino Basin. Recycled water will become an increasingly important source of renewable local water supply for the region which FWC will provide, when it is available, to customers in its service area who are able to use recycled water. Production of recycled water was approximately 61,400 AF in IEUA's service area in the year 2010, and is expected to increase to 83,400 AF by the year 2035. A recycled water marketing program was initiated by IEUA in 1999. Annual recycled water sales were about 24,500 AF in the year 2010, and are projected to be approximately 61,900 AF in the year 2035. Remaining future projected recycled water supplies will be used for groundwater recharge purposes and to meet Santa Ana River obligations.

The population within IEUA's service area is projected by the local retail water agencies (including FWC) to collectively increase from approximately 849,100 in 2010 to over 1,176,100 people by the year 2035. This represents an increase of approximately 327,000 people over a 25-year period, or an average annual growth rate of approximately 1.3 percent.

As a result of this projected regional population growth, water demand in IEUA's service area is expected to increase by approximately 15 percent over the 20-year period from 2015 to 2035. According to IEUA's 2010 UWMP, total annual water use is expected to increase from approximately 271,870 AF in 2015 to approximately 314,140 AF by the year 2035.

Projected water supplies within IEUA's service area include groundwater, surface water, recycled water, and untreated imported water purchased from MWD. According to IEUA's 2010 UWMP, total production from the Chino Basin and adjacent groundwater basins is projected to increase from approximately 180,000 AFY in 2015 to approximately 201,000 AFY in 2035 for normal years, although the Chino Basin could accommodate much greater water production rates if necessary.

According to IEUA's 2010 UWMP, IEUA conservatively projected total production from surface water supplies within its service area at approximately 28,500 AFY through the year 2035 for normal years. Surface water flows are substantially greater in wet years and less during dry years.

According to IEUA's 2010 UWMP, the direct use of recycled water within IEUA's service area in the year 2010 was approximately 17,300 AF. Recycled water use during normal years is expected to increase to approximately 83,400 AFY by 2035. As part of an existing agreement with IEUA, the City of Fontana is entitled to up to approximately 12,000 acre-feet per year of tertiary treated recycled water. FWC has undertaken a project with the City of Fontana for the direct use of recycled water in the southern portion of FWC's service area known as the 1158 Zone. This project will provide up to approximately 2,000 AFY of recycled water within the City of Fontana to schools, parks, and commercial customers as part of a multi-phased program.

The demand for direct delivery of untreated imported Colorado River and SWP water for the Chino Basin in normal years is projected to increase from approximately 80,600 AFY, in 2015, to approximately 86,000 AFY by the year 2035.

FWC supports and works closely with IEUA to implement a mix of water management strategies to meet the region's long-term needs. IEUA's water management goals are the following:

- Implement an effective conservation program that will maximize efficient water use and reuse in IEUA's service area;
- Continue development of a groundwater recovery program;
- Increase the safe storage capacity of the Chino Basin to 150,000 AFY and implement a conjunctive use/groundwater management program that provides dry year water supplies for the service area (the increased safe storage capacity potential is 500,000 AFY). In 2008, IEUA completed a CEQA document for the proposed expansion of the program;
- Achieve maximum use of all available storm water;
- Achieve maximum reuse of all available recycled water; and
- Minimize dependence on imported water supplies.

The water demands and supplies for IEUA's service area were analyzed by IEUA to assess the region's ability to meet demands given a repeat of California's severe drought from 2007 to 2009. With the implementation of the local programs outlined above, the region is expected to meet 100 percent of its dry year demand.

(vi) San Bernardino Valley Municipal Water District

SBVMWD was formed in 1954. It is an independent SWP contractor and is not a member agency of MWD. SBVMWD's services include providing wholesale distribution of untreated imported SWP water, and wastewater, stormwater disposal, recreation, and fire protection services.

SBVMWD, which covers approximately 325 square miles in southwestern San Bernardino County, serves a population of approximately 658,000. SBVMWD's service area includes the eastern two-thirds of the San Bernardino Valley, the Crafton Hills, and a portion of the Yucaipa Valley, and includes the cities and communities of San Bernardino, Colton, Fontana, Loma Linda, Redlands, Rialto, Bloomington, Highland, Grand Terrace, and Yucaipa.

Groundwater from the Colton, Rialto, Bunker Hill, Yucaipa, and San Timoteo Basins, is the principal local source of supply in SBVMWD's service area. Other sources of water supply include surface water from Lytle Creek, the Santa Ana River, and Mill Creek as well as imported SWP water.

SBVMWD's contract entitlement for SWP was 1,677 AF in 1972, the initial year of deliveries, and increased to a maximum entitlement of 102,600 AF in 1991. The entitlement is the fifth largest of all SWP contractors.

FWC has the ability to purchase and use untreated imported water from SBVMWD. A portion of FWC's service area is within SBVMWD's service area. FWC projects receiving at least 5,000 AFY of imported untreated SWP water from SBVMWD. FWC has upgraded its existing Sandhill Water Treatment Plant to treat approximately 29 mgd of Lytle Creek surface water and SWP water. The Sandhill Water Treatment Plant will treat the imported untreated SWP water from the SBVMWD in addition to treating available Lytle Creek surface water and SWP water from IEUA. FWC expects to receive greater quantities of SWP water from SBVMWD as population growth and development increase in the SBVMWD portion of FWC's service area.

(c) Historical Water Uses by Fontana Water Company's Customers

Water uses by FWC's customers can be attributed to the following four sectors:

- Residential and Commercial
- Industrial
- Public Authorities
- Construction

From 1988 to 2010, total annual water uses in these sectors ranged from 26,315 AFY to 46,832 AFY, with an average annual increase of 1.9 percent. Of the total water use, the residential and commercial sector accounts for 82.8 percent, industrial accounts for 6.9 percent, public authority accounts for 9.2 percent, and construction accounts for 1.1 percent.

(d) Fontana Water Company's Future Water Supplies

FWC's principal future water supplies available and documented in its 2010 UWMP are groundwater pumped from Chino Basin, Lytle Basin, Rialto Basin, and the No-Man's Land Basin, surface water from Lytle

Creek, recycled water, and imported water from SBVMWD and IEUA. The following describes the potential yield from these sources.

(i) Lytle Creek

FWC is entitled to divert up to 3,480.78 miner's inches (approximately 50,400 AFY) from the Lytle Creek Region, including up to 2,500 miner's inches (approximately 36,200 AFY) of combined surface and groundwater extractions to augment surface water diversions. USGS data from a Lytle Creek gaging station in the vicinity and upstream of FWC's diversion and intake facilities was used to determine the annual Lytle Creek flows. Based on USGS data, drought periods occurred from 1999 to 2002 and from 2006 to 2009. For the purposes of water supply planning, FWC's average diversion of approximately 5,700 AFY in normal rainfall years (during 1996, 1997, 2003, 2004 and 2005) will be available from Lytle Creek during normal rainfall years in the next twenty years.

FWC's average diversion of approximately 5,900 AFY during the recent drought period from 1999 to 2002 and from 2006 to 2009 is estimated to be available from Lytle Creek during future multiple dry years.

(ii) Lytle Basin

FWC can pump and divert more than 18,800 AFY of groundwater from the Lytle Basin. The basin is subject to changes in groundwater elevation depending on rainfall, snowpack, and stormwater runoff. This was demonstrated after the significant rainfall received in March of 1993, 2005 and 2010. In the months following a series of storms during those very wet years, basin static water levels increased as much as 200 feet in three months. This implies that basin static water levels could likewise decrease and thus affect groundwater production during sustained dry years. For the purposes of water supply planning, FWC's average groundwater production of approximately 9,400 AFY in normal rainfall years (during 1996, 1997, 2003, 2004 and 2005) is estimated to be available for pumping and diversion by FWC during normal rainfall years in the next twenty years. FWC's annual production of approximately 11,400 AFY, during the recent drought periods from 1999 to 2002 and 2006 to 2009, is estimated to be available during future droughts.

(iii) Chino Basin

FWC's average annual production from the Chino Basin from1995 to 2010 was approximately 16,600 AFY. During the most recent five years, FWC's annual production ranged from approximately 9,900 AFY to 19,600 AFY. According to IEUA's 2010 Regional UWMP, total groundwater production in IEUA's service area in a normal year is estimated to increase from approximately 180,100, in 2015, to 200,800 AFY, in 2035. The Chino Basin Judgment authorizes FWC to produce all the water it requires from the Chino Basin for beneficial use by FWC's public utility customers, subject to replenishment requirements, and more than ample water is present in the Chino Basin to allow FWC to do so. FWC will construct additional wells and associated infrastructure in the Chino Basin to match additional water demands with growth in customers. Because of groundwater contamination in the Chino Basin from nitrate and perchlorate, production of groundwater from affected wells may be interrupted until wellhead treatment is installed. FWC has the necessary technical and financial resources available to allow FWC to quickly respond to any such water quality incidents to assure continuity and reliability of water service. FWC's Wells F17B and F17C, which pump from the Chino Basin, currently have perchlorate treatment equipment, which removes perchlorate from these sources. FWC is currently constructing a perchlorate removal facility at its Plant F23. FWC plans

to utilize best available treatment technologies to install additional treatment and drill replacement wells as needed to meet its water supply needs.

(iv) Rialto Basin

FWC and other pumpers subject to the 1961 Rialto Basin Decree are authorized to pump from the Rialto Basin without restriction, although extractions for any given year may be curtailed depending on groundwater elevations in three key wells during March, April, and May of each year.

From 1984 to 2000, average groundwater levels were close to or higher than 1,002.3 feet above mean sea level (MSL). It is reasonable to assume that 7,600 AFY, which is the average production during the past ten years, from 2001 to 2010, will be available for pumping by FWC during normal rainfall years from 2015 to 2035. FWC's annual production of approximately 6,200 AFY, during the recent drought periods from 1999 to 2002 and 2006 to 2009, is estimated to be available during future droughts. In addition, FWC has the right to pump an additional 1,600 AFY from the Rialto Basin pursuant to a Standby Water Lease agreement with the City of Rialto, if needed.

(v) No-Man's Land Basin

FWC and Fontana Union hold senior appropriative pumping rights to produce groundwater from the No-Man's Land Basin. The United States Bankruptcy Court confirmed Plan of Reorganization for Fontana Union allocated groundwater production from this basin and water production restrictions are not applicable. FWC's groundwater production from the No-Man's Land Basin from 2006 to 2010 has averaged approximately 4,100 AFY. FWC has historically increased groundwater production from the No-Man's Land Basin and expects to be able to produce approximately 6,000 AFY by 2015.

(vi) Recycled Water

Achieving maximum use of all available recycled water is one of FWC's and IEUA's water management goals. Recycled water is used for groundwater recharge and storage as well as direct use by customers who are equipped and able to use recycled water. FWC strongly supports the use of recycled water and will provide recycled water to its customers who are able to use it when it is made available. FWC has undertaken a project with the City of Fontana for the direct use of recycled water in the southern portion of FWC's service area known as the 1158 Zone. This project will provide up to approximately 2,000 AFY of recycled water within the City of Fontana to schools, parks, and commercial customers as part of a multi-phased program. As part of an existing agreement with IEUA, the City of Fontana is entitled to up to approximately 12,000 AFY of tertiary treated recycled water. FWC is designing and will construct recycled water distribution system facilities in the 1158 Zone to meet those needs. Recycled water will be provided by IEUA's Regional Water Recycling Plant 4. In addition, facilities also will be required to distribute recycled water from IEUA to FWC's customers beyond the 1158 Zone. Those additional facilities will include pipelines, booster stations and reservoirs.

IEUA's "Recycled Water Three Year Business Plan", dated November 28, 2007, projected the total additional recycled water use (for direct use and groundwater recharge) within IEUA's service area by fiscal year 2010-11 at approximately 50,000 AFY. IEUA projected supplying recycled water for distribution within the City of Fontana in the amount of 1,656 AFY, by fiscal year 2009-10, and an additional 5,000 AFY, by fiscal year 2010-11, for a total recycled water supply of approximately 6,656 AFY. IEUA identified potential recycled water

users including schools, parks, and commercial customers, for irrigation and other uses. IEUA's "Draft Three Year Business Plan Update Fiscal Year 2010-11", dated September 28, 2010, indicates the anticipated scheduling of the total projected additional recycled water use of 50,000 AFY has been shifted to fiscal year 2011-12 due to recent economic conditions. IEUA's 2010 Regional Urban Water Management Plan states FWC will use approximately 6,000 AFY of recycled water by 2015.

(vii) Imported Water Supplies

As discussed previously, FWC can purchase untreated imported SWP water from SBVMWD and untreated imported water supplies from MWD (including Colorado River water, SWP water, water storage, and water transfers) through IEUA.[1] According to FWC's 2010 UWMP, FWC conservatively estimates it will receive up to 5,000 AFY of SWP water from IEUA and up to 2,000 AFY of SWP water from SBVMWD over the next twenty years.

FWC has the capacity to purchase additional imported SWP water from IEUA and SBVMWD if needed to meet current and future water demands reported in the FWC's 2010 Urban Water Management Plan.

Colorado River Water

MWD owns and operates the Colorado River Aqueduct which conveys water from Lake Havasu on the Colorado River to water transmission pipelines and to Lake Matthews for storage. MWD's Colorado River water right includes a fourth and fifth priority under the 1931 Seven Party Agreement relating to California's share in the Colorado River water supply. In 1964 a United States Supreme Court decree (*Arizona v. California*) limited California to 4.4 million AF per year from the Colorado River plus any available surplus water. An amount of 550,000 AF was allotted to California under the fourth priority right and an amount of 662,000 AF was allotted to California under the fifth priority right. MWD can receive water under the fifth priority right when the United States Secretary of the Interior determines that there is a surplus of water or if Arizona or Nevada does not use all of their allocated water.

State Water Project

The SWP is a water storage and delivery system maintained and operated by DWR. MWD holds a long-term contract with DWR for SWP water. MWD currently has a contractual 'Table A' amount of 1,911,500 AFY of SWP water ('Table A' represents the proportion of available SWP water allocated and delivered to each SWP contractor). The delivery reliability of SWP water is discussed below.

DWR plans to develop additional water supply facilities in order for the SWP to deliver contracted water beyond historical delivery quantities. Water diverted at the Sacramento-San Joaquin Delta by the SWP must be water that is surplus to the needs of the areas of origin. Also, water quality requirements in the Sacramento-San Joaquin Delta affect the quantity of water available to the SWP.

State and federal resources and environmental protection agencies and a broad range of stakeholders have been involved in a multi-year planning process referred to as the CALFED process to develop programs to greatly improve the capacity and reliability of the SWP and the environmental conditions of the San

[1] *Fontana Water Company has an existing standby connection with IEUA to receive untreated water from MWD at its Plant F43.*

Francisco Bay -Sacramento River Delta area (Bay-Delta). The Bay-Delta is a part of the SWP water delivery system. The Bay-Delta cooperating agencies approved a Record of Decision in August 2000 for a Programmatic Environmental Impact Report/Impact Statement for a multi-year improvement program. The improvement program includes projects related to DWR's SWP conveyance capacity, water quality, and operation of the SWP. Those programs are, of course, subject to environmental review and public input is required.

According to DWR's "The State Water Project Delivery Reliability Report 2009" (August 2010), the delivery reliability of SWP water is approximately 60 percent, on average, over the next 20 years. The DWR report incorporated future impacts on water deliveries as a result of climate change and potential limited pumping of the SWP to protect salmon, smelt, and other species in the Sacramento-San Joaquin Delta and Central Valley areas (including operational restrictions of the biological opinion issued by the U.S. Fish and Wildlife Service in December 2008 and the National Marine Fisheries Service in June 2009 governing the SWP and Central Valley Project operations). Although a U.S. District Court Judge invalidated portions of the biological opinion in December 2010, the Judge allowed the federal government until December 2013 to rework the biological opinion, and left the existing plan in place while the new one is being written. Legal decisions regarding Delta smelt and other sensitive aquatic species have reduced the estimated median annual average supply on the SWP from about 3,170,000 AF in 2005 to about 2,680,000 AF in 2009. The long-term impact of these restrictions is not known at this time. In response to water supply and environmental concerns, the state legislature established the Delta Stewardship Council which is charged with developing a comprehensive management plan that provides more reliable water supply for California and protects and enhances the Delta ecosystem. The Delta Stewardship Council prepared a draft Delta Plan which formed the basis of the draft Environmental Impact Report that was released in November 2011.

The Bay Delta Conservation Plan (BDCP) is currently being prepared through a collaboration of state, federal, and local water agencies, state and federal fish agencies, and a broad range of stakeholders. The BDCP will identify conservation strategies, water flow, and habitat restoration actions in California's Sacramento-San Joaquin Delta. The goal of the BDCP is to provide for both species/habitat protection and improved reliability of water supplies. The draft BDCP and associated Draft EIR have been completed and are currently available for public review through June 2014.[2]

During calendar year 2007, critically dry conditions impacted MWD's main water supply sources. In addition, a ruling in the Federal Courts in August 2007 provided protective measures for the Delta Smelt (and subsequently other aquatic species) in the Sacramento-San Joaquin River Delta resulting in restrictions on the availability of SWP water. As a result, MWD adopted a Water Supply Allocation Plan (WSAP), in February 2008 to allocate available water supplies to its member agencies. The WSAP establishes ten different shortage levels and a corresponding Allocation to each member agency. Based on the shortage level established by MWD, the WSAP provides a reduced Allocation to a member agency for its Municipal and Industrial (M&I) retail demand and provides a reduced Allocation for the Interim Agricultural Water Program (IAWP). The WSAP considers historical local water production, full service treated water deliveries, agricultural deliveries and water conservation efforts when calculating each member agency's Allocation.

[2] *Bay Delta Conservation Plan. "Public Review". http://baydeltaconservationplan.com/PublicReview.aspx. Accessed March 2014.*

In general, the WSAP process calculates total historical member agency demand. That historical demand is then compared to member agency projected local supply for a specific Allocation year. The balance required from MWD, less an Allocation reduction factor, is the member agency's "Water Supply Allocation". When a MWD Member Agency (such as IEUA) reduces its local demand through conservation or other means, the Allocation will increase. The increased Allocation can be used for Full Service replenishment deliveries at such times an Allocation is in place.

In addition, MWD is currently updating its Integrated Resources Plan to evaluate water supply availability considering the recent developments and provide a water resource strategy to meet future demands including anticipated groundwater replenishment demands. For the purpose of protecting and preserving the groundwater supplies within the Chino Basin, IEUA, the Chino Basin Watermaster (CBWM), the Chino Basin Water Conservation District (CBWCD), and the San Bernardino County Flood Control District (SBCFCD) jointly sponsor the Chino Basin Recycled Water Groundwater Recharge Program. The program consists of infrastructure and pipelines that direct stormwater run-off, imported SWP water, and IEUA recycled water to groundwater recharge sites within the Chino Basin. The Chino Basin Recycled Water Groundwater Recharge Program will assist in mitigating possible future water shortages in Southern California due to potential limits on imported SWP water.

Imported Water from SBVMWD

FWC projects receiving at least 2,000 AFY of imported water supplies from SBVMWD. FWC expects to receive greater quantities of SWP water from SBVMWD as population and water use increase in the SBVMWD portion of FWC's service area.

The delivery reliability of SWP water from SBVMWD is similar to the previous discussion of SWP deliveries above. SBVMWD currently has a contractual 'Table A' amount of 102,600 AFY of SWP water. Although FWC expects to receive greater quantities of SWP water from SBVMWD in the future, FWC's 2010 Urban Water Management Plan conservatively projects that it will receive up to 2,000 AFY of SWP water from SBVMWD in the next twenty years. Based on SBVMWD's 2010 Regional UWMP, SBVMWD will have surplus SWP water supplies available to meet all of its member agencies' SWP water demands (including at least up to 2,000 AFY of demand from FWC) from 2015 to 2035, including during single and multiple dry years. SBVMWD anticipates storage of SWP water during normal and wet years for use, along with direct deliveries, during dry years. Imported water provided by SBVMWD will be treated at FWC's Sandhill Water Treatment Plant, which is discussed in the following section on imported water from IEUA.

Imported Water from IEUA

FWC's upgraded Sandhill Water Treatment Plant can treat imported water from IEUA and SBVMWD and local surface water from Lytle Creek. The Sandhill Water Treatment Plant, which has a capacity of up to 29 mgd, includes a 40 cfs connection with IEUA to receive untreated SWP water. FWC's 2010 UWMP conservatively assumed that FWC will receive at least 5,000 AFY of SWP water from IEUA in the next twenty years. Imported water supplies will allow FWC flexibility in managing its water supply sources both short and long term, as well as in normal and dry years. Also, the upgraded Sandhill Water Treatment Plant allows FWC to treat and maximize the use of SWP supplies and turbid Lytle Creek storm water flows that could not be used in the past.

(2) Cucamonga Valley Water District

(a) CVWD Service Area Population

In recent years, a boom in the real estate market occurred and the CVWD service area experienced among the highest increases in housing prices and new home growth from 1997 to 2005 in the nation. The population within CVWD grew from 144,240 in 2000 to 176,344 in 2005, an average annual increase of four percent. But in 2006 the nation experienced a correction in the housing market and as a result, the CVWD service area annual population growth slowed to around one percent from 2006 to 2008.

The CVWD service area is currently 70-percent built-out and the majority of service area remaining for development resides in the northern/foothill areas of Rancho Cucamonga, in Fontana north of Baseline Road, and San Bernardino County. Those areas in general have been zoned for low density residences. There also has been discussion of converting the land use of much of the upper foothills to conservation land, but to be conservative, it is assumed that this will not occur. Therefore, it is estimated that the build-out population will be around 223,855.

Taking into consideration the slowing economy and the remaining build-out, CVWD service area is projected to achieve build-out around 2035 instead of earlier predictions of 2025. In addition, it is also anticipated that insignificant or zero growth will occur from 2008 through 2010, after which CVWD population will grow at a steady rate of less than one percent annually until build-out.

(b) CVWD Water Demands

CVWD's water demands are divided into four main categories: (1) Customer Consumption, (2) Water Sales/Transfers, (3) Unaccounted Water Loss, and (4) Conservation. Projected water demands include consideration for the effects of growth, and varying annual temperature and precipitation.

The effects of temperature and precipitation can best be seen from the varying water consumption on a month-to-month and year-to-year basis. On a month-to-month basis, low water demands will occur during the cooler rainy season of December to March. The lowest water demand month occurs in February. Conversely, the high water demands occur during the hot summer season of June to September. The highest water demand month occurs in either July or August.

Much of this dramatic fluctuation can be attributed to fluctuations in outdoor usage. Since the majority of water used within the house or business goes down the sewer drain, a direct correlation has been made between sewer flows and indoor water use. CVWD finds that sewer flows within CVWD remains constant from month-to-month throughout the year. Therefore it is likely that indoor water consumption remains constant and is not affected by temperature or rainfall. This suggests that the majority of the water use above the low month of February can be attributed to increases in outdoor water use (note this does not infer that there is no outdoor usage during February).

Similarly, on a year-to-year basis, CVWD will experience higher water demands during times of drought or low rainfall, and lower water demands during years that have cooler temperatures and higher precipitation. Unfortunately, this pattern of water demand is inversely proportional to water availability. As a result, the Water Supply Master Plan will take a conservative approach and plan for the worst case scenario of summer

drought conditions. Given that 2007 was the driest year within CVWD since 2000, projected water demand will be determined using 2007 as a base year for water consumption.

(i) Customer Consumption

Similar to population growth, CVWD anticipated that insignificant or zero growth in water consumption would occur from 2008 to 2010, after which CVWD water consumption would grow at a steady linear rate until build-out, estimated to be in 2035.

(ii) Water Sales/Transfers

CVWD shares several interconnections, which allows CVWD to buy and sell water to our neighboring water agencies. Since CVWD's first priority is to its customers, it is District policy to only sell water when available and currently CVWD has been a net seller of water. These transactions only amount to a fraction of a percent of CVWD's total water demand.

To account for the worst case scenario in the future, it will be assumed that all projected annual sales and purchases will be equal and that CVWD will maintain a zero balance of water sales/transfers each year.

(iii) Unaccounted Water Loss

Unaccounted water is the difference between water that is produced and purchased by CVWD versus the metered amount of water that is sold to customers. From 2000 to 2008, CVWD's unaccounted water loss ranged from two percent to nine percent, or averaging slightly above five percent. This is better than the industry-wide acceptable amount for unaccounted water loss of ten percent. A conservative unaccounted water rate of six percent is used for this projection.

There are three main reasons for unaccounted water within CVWD system: water leaks, meter inaccuracy, and unmetered usage. Water leaks will occur due to deterioration of aged infrastructure. Unmetered usage is the water lost when fire hydrants are hit by cars, inadvertent and/or intentional use of unmetered water at construction sites, running the State mandated flushing program, and the few occasions when a reservoir overflows. Meter inaccuracy can cause unaccounted water loss due to the constant percentage of error for each meter and occasional water flow rates too low to be registered by a meter.

(iv) Conservation

Over the last decade CVWD has developed a robust conservation program that includes encouraging water use efficiency, having strategies for drought planning, using best management practices, charging tiered rates, providing customer incentive programs, and having an active public awareness program. Through these programs, it has been CVWD's goal to increase conservation in order to reduce water use by ten percent of the total demand by the year 2015 (using 2007 as the base year).

(c) CVWD Water Production

Due to uncertainty and reliability of any one source at any particular time, it has been CVWD goal to diversify its water supply sources. CVWD also looks to develop the most cost effective water supply mix to minimize the cost to our customers. Currently, CVWD's water production comes from four main sources: Imported Water, Groundwater, Canyon Water, and Recycled Water. On average from 2000 to 2011, Imported Water

accounted for 50 percent, Groundwater for 38 percent, Canyon Water for seven percent, and Recycled Water accounted for less than one percent of CVWDs total water supplied.

Based on the water mix, the CVWD is looking to decrease CVWD's reliance on imported water supplies from northern California, increase its pumping capacity in the Chino Basin, increase the use of recycled water and secure additional sources of high quality water. This will allow CVWD to develop multiple supply strategies, which will allow CVWD to better address water demands. Together, these efforts will improve the overall water supply outlook for the CVWD and its customers.

(i) Imported Water Supply

CVWD purchases imported water from the IEUA, which as noted above, is a member agency of MWD. Imported water is CVWD's most significant water supply, currently accounting for approximately 60 percent of CVWD's water. CVWD's Lloyd W. Michael Water Treatment Plant (LMWTP) by itself is capable of supplying over 67,000 acre-feet of water per year, which could account for up to 80 percent of CVWD's demand at build-out. CVWD has connections to untreated State Water Project water and untreated Colorado River water, but due to the lack of treatment facilities at the Colorado River Water connection, CVWD currently only takes water from the SWP.

As discussed above, there is currently a court-ordered supply cutback in the State Water Project due to environmental impacts associated with pumping water from the Delta. This situation will result in an approximate one-third reduction in supply and has triggered additional expenditures for the development and acquisition of new supplies and increased conservation efforts on behalf of MWD and their customers. Coupled with limitations on the Colorado River, these issues have placed an increased burden on imported water supplies from Northern California, not only for CVWD but throughout Southern California. These factors make imported water availability to CVWD very volatile.

Even though the available State water supply has been reduced, MWD, as well as other agencies, share the financial obligations and operation and maintenance costs on the State infrastructure system, which must continue to be paid. Imported water is CVWD's most expensive water supply and based on these factors, it is likely that there will be substantial cost increases in the future.

(ii) Ground Water Supply

CVWD is located in two major groundwater basins: Cucamonga Basin and Chino Basin. As stewards of our collective natural resources, it is CVWD's goal to manage and protect the groundwater basins so that water will always be available. To do this, CVWD is driven to increase groundwater recharge capabilities within both the Chino and Cucamonga Basins through recycled water recharge and the construction and conversion of existing well to be ASR wells. This will allow CVWD to help maintain groundwater levels, protect the groundwater basins from over pumping and give CVWD groundwater recharge credit.

Aquifer Storage Recovery (ASR)

Aquifer Storage Recovery (ASR) is the storage of water in a well during times when water is available, and recovery of the water from the same well during times when it is needed. Large water volumes are stored deep underground, reducing or eliminating the need to construct large and expensive surface reservoirs and

can also assist to restore groundwater levels if adequate water is recharged. It is intended that all future District wells be sized and equipped to accommodate a future conversion to become ASR wells.

Recycled Water Groundwater Recharge

Recycled water can be delivered to spreading or recharge basins where the water can soak into the ground. When the recycled water enters the spreading basin it starts to soak into the soil, which consists of layers of sand, gravel, and clay. These layers allow the recycled water to undergo further physical, biological and chemical purification as the water filters through soil containing natural bacteria that utilize the available nutrients in the water. The water soaks deep into the ground and ultimately becomes part of the groundwater system. CVWD is preparing a Recycled Water Master Plan that makes recommendations of infrastructure that will deliver recycled water to recharge basins.

(d) CVWD Water Supply

(i) Water Rights and Available Supply

Groundwater from the Chino Basin, imported state water from the Metropolitan Water District of Southern California, local canyon and surface water, and recycled water from the Inland Empire Utilities Agency will be available to CVWD customers. The CVWD will be able to supply the service area with a comprehensive water portfolio and will be able to adjust accordingly between potable sources depending on hydrological, meteorological, and other factors that may arise.

Depending on future infrastructure improvements by IEUA and CVWD, there is the possibility of providing up to 10,000 AFY of recycled water in the future. Based on current trends and infrastructure construction, CVWD has taken a conservative approach and is projecting only 7,300 AFY of recycled water will be available for use by 2035, which would be eight percent of the total water supply. **Table 4.O.1-3**, *Summary of Current and Planned Water Supplies*, below, summarizes CVWD's long-term supply sources through the year 2035.

Table 4.O.1-3

Summary of Current and Planned Water Supplies

CVWD Supply Sources	2010	2015	2020	2025	2030	2035
Groundwater (AFY)	23,679	27,732	26,819	26,819	26,819	26,819
Canyon/Surface Supplies (AFY)	3,954	4,200	4,200	4,200	4,200	4,200
Imported Water Purchases (AFY)	28,369	28,369	28,369	28,369	28,369	28,369
Recycled Water						
Non-Potable (AFY)	591	1,800	2,050	2,300	2,550	2,800
Groundwater Recharge (AFY)	1871	3,000	4,500	4,500	4,500	4,500
Total CVWD Supplies (AFY)	50,463	65,101	65,938	66,188	66,438	66,688

Source: PCR Services Corporation, 2014

(ii) Projections

As discussed above under Water Demands, increase consumption is assumed to be insignificant or zero growth from 2008 to 2010, after which CVWD water consumption is assumed to grow at a steady linear rate until the year 2035. Since water production must equal water demand, the following projections and scenarios accounting will balance the total water production to the total water demand:

Projected Water Demand

Projected water demand components are Local Consumption, Unaccounted Water, Exported Water and Conservation. As discussed above under Unaccounted Water Loss, the Projected Unaccounted Water will be calculated to be six percent of the Local Consumption. To be conservative, it is assumed that the balance for the sale and purchase of Exported Water will be a net zero. Conservation is a percentage of local consumption and subtracted from the total demand.

Projected Water Production

Projected water production components are Groundwater, Canyon Water, Imported Water and Recycled Water. Groundwater has been further divided into Chino Basin and Cucamonga Basin. Canyon Water has been divided to Cucamonga Canyon, Deer Canyon and Day/East Canyon. Imported Water has been divided into Tier I and Tier II water. The allocation for Tier I imported water will be 28,369 AFY until 2010 and will then be 30,723 AFY in 2011 and beyond (see table and discussion below). When there is a Dry-Year Yield (DYY) call, CVWD's Total Tier I imported water will be reduced by 11,353 AFY and shifted to Chino Basin Groundwater pumping.

(iii) Water Supply Reliability by Hydrologic Conditions

The CVWD's 2010 Urban Water Management Plan developed CVWD's water supply assessment reliability per three categories of hydrologic conditions. The three hydrologic conditions are the following: normal, single dry year, and multiple dry years. **Table 4.O.1-4**, *Water Supply and Demand Comparison for Normal Hydrologic Condition*, below, summarizes water supply and demand comparison for normal hydrologic conditions. **Table 4.O.1-5**, *Water Supply and Demand Comparison for Single-Year Condition (2004)*, below, summarizes water supply and demand comparison for a single-year dry condition. **Table 4.O.1-6**, *Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition*, below, summarizes water supply and demand for multiple dry year hydrologic conditions. Groundwater is based on long-term safe yield conditions and is not expected to vary from a hydrological standpoint. Canyon and surface water supplies can vary depending upon climate conditions. The UWMP took into account average yields for the period of 2001-2010 for average year hydrologic conditions. The period between 2002 and 2004 was considered representative of the single dry year for local supplies. During dry years, MWD imported water may be curtailed but CVWD's groundwater storage would provide enough dry year supply for the reduced surface water supplies and possible shortfall of MWD water.

Table 4.O.1-4

Water Supply and Demand Comparison for Normal Hydrologic Condition

Supply / Demand (AFY)	2015	2020	2025	2030	2035
Existing Groundwater	27,732	26,819	26,819	26,819	26,819
Existing Canyon/Surface	4,200	4,200	4,200	4,200	4,200
Imported Water from MWD	28,369	28,369	28,369	28,369	28,369
Planned Recycled Water					
Non-Potable	1,800	2,050	2,300	2,550	2,800
Groundwater Recharge	3,000	4,500	4,500	4,500	4,500
Total Supply	65,101	65,938	66,188	66,438	66,688
Total Demand	57,600	56,300	58,100	60,100	61,900
Surplus/Shortage	7,501	9,638	8,088	6,338	4,788
Surplus/Shortage as % of Supply	12%	15%	12%	10%	7%
Surplus/Shortage as % of Demand	13%	17%	14%	11%	8%

Source: Cucamonga Valley Water District, 2012.

Table 4.O.1-5

Water Supply and Demand Comparison for Single-Year Condition (2004)

Supply / Demand (AFY)	2015	2020	2025	2030	2035
Existing Groundwater	27,732	26,819	26,819	26,819	26,819
Existing Canyon/Surface	1,739	1,739	1,739	1,739	1,739
Imported Water from MWD					
Tier I	17,016	17,016	17,016	17,016	17,016
MWD Dry Year Yield Program	11,353	11,353	11,353	11,353	11,353
Planned Recycled Water					
Non-Potable	1,800	2,050	2,300	2,550	2,800
Groundwater Recharge	1,967	2,880	4,500	4,500	4,500
Total Supply	61,607	61,857	63,727	63,977	64,227
Total Demand	57,600	56,300	58,100	60,100	61,900
Surplus/Shortage	4,007	5,557	5,627	3,877	2,327
Surplus/Shortage as % of Supply	7%	9%	9%	6%	4%
Surplus/Shortage as % of Demand	7%	10%	10%	6%	4%

Source: Cucamonga Valley Water District, 2012.

Table 4.O.1-6

Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition

Year	Supply / Demand (AFY)	2015	2020	2025	2030	2035
First, Second, and Third Year of Supply	Existing Groundwater	27,732	26,819	26,819	26,819	26,819
	Existing Canyon/Surface	2,270	2,270	2,270	2,270	2,270
	Imported Water from MWD					
	Tier I	17,016	17,016	17,016	17,016	17,016
	MWD Dry Year Yield Program	11,353	11,353	11,353	11,353	11,353
	Planned Recycled Water					
	Non-Potable	1,800	2,050	2,300	2,550	2,800
	Groundwater Recharge	1,967	2,880	4,500	4,500	4,500
	Total Supply	62,138	62,388	64,258	64,508	64,758
	Total Demand	57,600	56,300	58,100	60,100	61,900
	Surplus/Shortage	4,538	6,088	6,158	4,408	2,858
	Surplus/Shortage as % of Supply	7%	10%	10%	7%	4%
	Surplus/Shortage as % of Demand	8%	11%	11%	7%	5%

Source: Cucamonga Valley Water District, 2012.

b. Regulatory Framework

(1) State

(a) California Urban Water Management Plan Act

The California Urban Water Management Planning Act (California Water Code [CWC] Division 6, Part 2.6, Sections 10610-10656) addresses several State policies regarding water conservation and the development of water management plans to ensure the efficient use of available supplies. The California Urban Water Management Planning Act also requires water suppliers to develop water management plans every five years to identify short-term and long-term demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Specifically, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet (AF) per year of water must adopt an UWMP.

(b) Senate Bill 610, Senate Bill 221, and Senate Bill 7

State legislation addressing water supply, Senate Bill (SB) 610 and SB 221, became effective January 1, 2002. SB 610, codified in CWC §10910 et seq., describes requirements for both water supply assessments (WSAs) and UWMPs applicable to the California Environmental Quality Act (CEQA) process. SB 610 requires that for projects subject to CEQA, which meet specific size criteria, the water supplier must prepare a WSA that determines whether the projected water demand associated with a proposed project is included as part of the most recently adopted UWMP. Specifically, a WSA shall identify existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. In addition, it must address water supplies over a 20-year period and consider normal, single-dry, and multiple-dry year conditions. In accordance with SB 610 and Section 10912 of the CWC, such projects subject to CEQA requiring completion of a WSA include the following:

- Residential developments of more than 500 dwelling units;
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use projects that include one or more of the projects specified in this subdivision; or
- Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project.

The WSA must be approved by the public water system at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the WSA.

In addition, under SB 610, a water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, the following additional information must be included in the UWMP: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

Complementary legislation to SB 610 was enacted on November 10, 2009, with the passage of SB 7. SB 7 mandates new water conservation goals for UWMPs, requiring urban water suppliers to achieve a 20 percent per capita water consumption reduction by the year 2020 statewide, as described in the "20 x 2020" State Water Conservation Plan.[3] As such, each updated UWMP must now incorporate a description of how each respective urban water supplier will quantitatively implement this water conservation mandate, in addition to the requirements of SB 610.

SB 221 also addresses water supply in the land use planning process and focuses on new residential subdivisions in non-urban areas. SB 221 requires that written verification from the water service provider be submitted indicating sufficient water supply is available to serve a proposed subdivision, or the local agency shall make a specified finding that sufficient water supplies are or will be available prior to completion of a project. SB 221 specifically applies to residential subdivisions of 500 units or more. In addition, Government Code Section 66473.7(i) exempts "…any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses; or where the immediate

[3] *California State Water Resources Control Board, 20 x 2020 Water Conservation Plan, February 2010. http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/docs/20x2020plan.pdf.*

contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses; or housing projects that are exclusively for very low and low-income households."

The proposed project is subject to the requirements of SB 610, as it includes the development of 500 residential units and retail uses in excess of 500,000 square feet, and would it generate a water demand equivalent to or greater than that required by a 500 dwelling unit project. Therefore, a WSA is required from the applicable water suppliers to demonstrate the proposed project's water demand is included as part of the most recently adopted UWMP. Further, future development of residential uses under the proposed Specific Plan is subject to the requirements of SB 221 because it includes construction and operation of 500 or more dwelling units.

(c) California Code of Regulations

Title 20, Sections 1605.1(h) and 1605.1(i) of the California Code of Regulations (CCR) establishes efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The maximum flow rate for showerheads and lavatory faucets are 2.5 gallons per minute (gpm) at 80 pounds per square inch (psi) and 2.2 gpm at 60 psi, respectively. In addition, Section 1605.3(h) establishes State efficiency standards for non-federally regulated plumbing fittings, including commercial pre-rinse spray valves.

(d) Global Warming and Climate Change

Global warming and climate change should be considered in assessing water supply in California. Potential impacts of climate change on California's water resources include changes in both water and air temperature, changes in precipitation patterns, and changes in sea levels that could increase pressure on the Sacramento-San Joaquin River Delta (Delta) levees. The impact of climate change on California's water supply has already been the subject of study. In response to Governor's Executive Order S-3-05, California Department of Water Resources (DWR) prepared its most recent report on this issue in May 2009, entitled "Using Future Climate Projections to Support Water Resources Decision Making in California," which presents an overview of the advances that DWR has made toward using future climate projection information to support decision making by quantifying possible impacts to water resources for a range of future climate scenarios. Advances have been made in using future climate projection information in water resources planning in California, including improved understanding of how well selected climate models represent historical climate conditions and refined methodologies for representing stream flows, outdoor urban and agricultural water demands, and sea level rise in planning tools. The range of impacts presented indicated the need for adaptation measures to improve the reliability of future water supplies in California.[4]

DWR has further addressed the issue of climate change and how it can affect California's water supply, by undertaking mitigation and adaptation measures. DWR is a member of the California Climate Action Registry and is listed as a "Climate Action Leader" for reporting its greenhouse gas emissions for three consecutive years (2007, 2008 and 2009), and having the data verified by third party audit.[5] In 2008, DWR

[4] *"Using Future Climate Projections to Support Water Resources Decision Making in California," May 2009, California Department of Water Resources, page 2.*

[5] *California Climate Action Registry, Climate Action Leaders. http://www.climateregistry.org/about/members/climate-action-leaders.html. Accessed April 26, 2011.*

adopted the "Climate Change Adaptation Strategy," which urges a new approach to California's water and other natural resources in the face of changing climate.[6] In 2009, DWR adopted its own Sustainability Policy, and in 2010, DWR established clear and measurable goals for sustainability implementations.[7],[8]

In December 2010, DWR prepared a survey which presents summaries of 13 different reports and studies prepared by DWR addressing climate change entitled "Climate Change Characterization and Analysis in California Water Resources Planning Studies - Final Report." Although DWR was one of the early leaders in including climate change analysis in its planning studies and reports, it does not currently have a standard framework or a set of recommended approaches for considering climate change in its planning studies. A variety of approaches to characterize and analyze future climate have been used in various DWR planning studies. The December 2010 paper summarized the approaches and methodologies that have been used since 2006. It is the first comprehensive comparative look at the different approaches, their strengths and weaknesses, and how they have been used in past studies. This work is anticipated to lay the groundwork for a future DWR study aimed at developing a standard framework and a consistent set of approaches to be used for characterizing and analyzing climate change in future DWR planning studies and which may provide guidance for DWR partners and grantees.[9]

While climate change is expected to continue through at least the end of this century, the magnitude and nature of future changes are uncertain. This uncertainty serves to complicate the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood.[10] However, preliminary modeling conducted by DWR indicates that under one climate change scenario, average yearly SWP Table A deliveries in 2050 would be reduced by 10.2 percent.[11]

In light of these conclusions, both governmental agencies and non-governmental organizations recommend that water decision-makers operate existing water systems to allow for increased flexibility. Other recommendations include incorporating climate change research into infrastructure design, conjunctively managing surface water and groundwater supplies, and integrating water and land use practices. As a result, in March 2002, the Metropolitan Water District of Southern California's (MWD) Board of Directors adopted climate change policy principles that relate to water resources. These principles are reflected in MWD's Integrated Resource Plan (IRP), which was updated October 12, 2010.[12] Further, in response to climate

---

6 *Climate Change Adaptation Strategies for California's Water: Managing an Uncertain Future, California Department of Water Resources, October 2008. http://www.water.ca.gov/climatechange/docs/ClimateChangeWhitePaper.pdf.*

7 *Memorandum to All DWR Employees, "Sustainability Workgroup," California Department of Water Resources, April 22, 2009. http://www.water.ca.gov/climatechange/docs/Sustainability_Policy.pdf.*

8 *Memorandum to All DWR Employees, "Sustainability Targets," California Department of Water Resources, September 20, 2010. http://www.water.ca.gov/climatechange/docs/Sustainability_Policy.pdf.*

9 *"Climate Change Characterization and Analysis in California Water Resources Planning Studies - Final Report," California Department of Water Resources, December 2010, page v.*

10 *"Progress on Incorporating Climate Change into Management of California's Water Resources," July 2006, California Department of Water Resources, page 2-54.*

11 *Table A water deliveries represent the schedule of the maximum amount of water that water contractors to the DWR may receive annually from the SWP. There are 29 water contractors who have signed long term contractors with the DWR for a total of 4,173 million acre feet per year. Table A deliveries are not guarantees of annual delivery amounts but are used to allocate individual contractors' portion of the delivery amounts available.*

12 *Integrated Water Resources Plan, Report No. 1373, Updated October 12, 2010. The Metropolitan Water District of Southern California. http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/IRP2010Report.pdf.*

change and uncertainty, MWD's 2010 Regional UWMP incorporated three basic elements to promote adaptability and flexibility, important in addressing impacts of climate change: conservation, groundwater recharge, and water recycling.[13]

MWD also approved criteria to further explain its position on the conveyance options that are currently being discussed to remedy the Delta, which include addressing projected sea level rise and change in inflows due to climate change. MWD's criteria provide that, "whatever option is chosen, it should provide water supply reliability, improve export water quality, allow flexible pumping operations in a dynamic fishery environment, enhance the Delta ecosystem, reduce seismic risks, and reduce climate change risks."[14] MWD has demonstrated a commitment to addressing climate change by evaluating the vulnerability of its water systems to global warming impacts and has developed appropriate response strategies and management tools that account for the impacts of climate change on future water supplies. For further discussion on the effects of global climate change, please refer to Section 4.B, *Air Quality*, of this Draft EIR.

(e) City of Fontana General Plan

The Open Space & Conservation Element of the City's General Plan contains various goals and policies related to water service and related infrastructure, which are intended to facilitate ongoing water conservation efforts within the City.

(f) City of Fontana Municipal Code

Chapter 31, *Water Service*, of the Fontana Municipal Code (FMC) regulates the provision of water service within the City, but only applies to those areas where the City of Fontana supplies retail domestic water service, and does not apply to water service provided by other special water districts, private and mutual water companies. As the project site is within the service areas of FWC and CVWD, Chapter 31 of the FMC is not applicable to the proposed project.

3. PROJECT IMPACTS

a. Methodology

The analysis of impacts with regard to water infrastructure capacity is based on information provided by Hall & Foreman in the *Westgate Specific Plan Infrastructure Study* (appendix L of this Draft EIR). The analysis assesses whether the project's anticipated domestic water demand would be accommodated by the existing water infrastructure would be met. Impacts regarding water sufficiency for fire-fighting are addressed in Section 4.L, *Public Services*, of this Draft EIR.

The water demand for proposed land uses was calculated in the *Westgate Specific Plan Infrastructure Study* (appendix L of this Draft EIR) based on generation factors provided by FWC and CVWD. The estimated increase in water demand was then compared to the growth projected for the area in the currently approved 2010 UWMPs for each of the two purveyors serving the project area in the Water Supply Assessments

[13] *The Regional Urban Water Management Plan, November 2010. The Metropolitan Water District of Southern California. http://www.mwdh2o.com/mwdh2o/pages/yourwater/RUWMP/RUWMP_2010.pdf.*

[14] *Report for Metropolitan Water District of Southern California Board Meeting September 11, 2007 Agenda Item 8-4, emphasis added.*

prepared for the project by FWC and CVWD (Appendix K of this Draft EIR). The project's water consumption features were also reviewed for consistency with regulatory provisions for water conservation.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including water supply. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to water supply would occur if the project would result in one or more of the following:

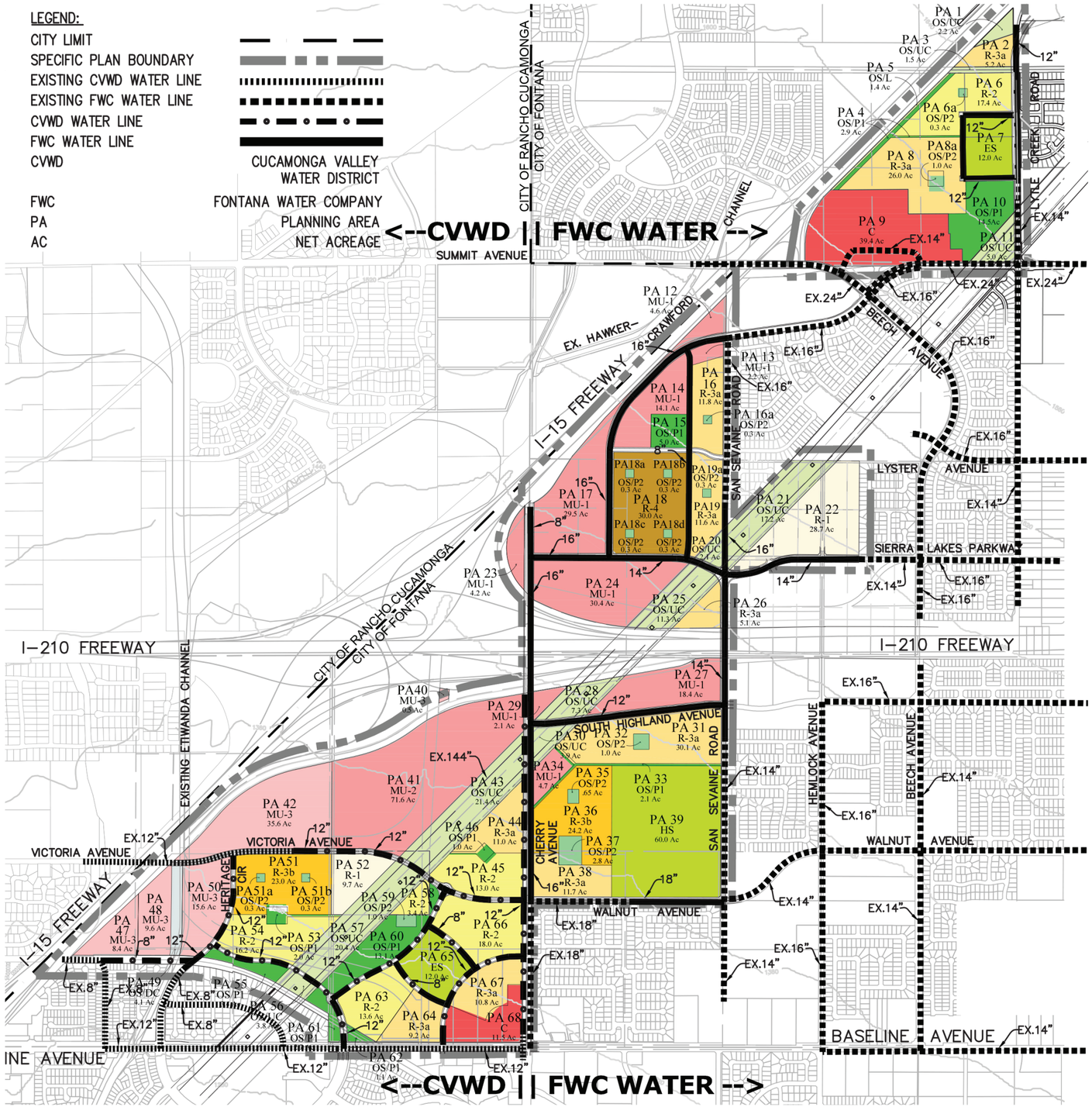
Threshold 1: Require or result in the construction of new water facilities or the expansion of existing facilities, the construction of which would cause significant environmental effects (refer to Impact Statement 4.O.1-1 below); or

Threshold 2: Have sufficient water supplies available to service the project from existing entitlements and resources, or are new expanded entitlements needed (refer to Impact Statement 4.O.1-2 below).

c. Project Design Features

The proposed project would be implemented over a period of over 20 years and as such infrastructure, including water lines and related facilities, would be constructed on-site as development occurs in order to meet associated demands. As discussed in the *Westgate Specific Plan Infrastructure Study* (Appendix L of this Draft EIR), water pipe size requirements have been calculated for proposed future uses based on anticipated maximum water demands. Existing water distribution facilities in the project area, as well as future on-site water system improvements based on the calculated water pipe sizes noted above, are illustrated in **Figure 4.O.1-1**, *Water Master Plan*, below.

The Westgate Specific Plan will also become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the Westgate Specific Plan will achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CalGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, and requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects. In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape irrigation in public parks and right-of-ways. The Inland Empire Utilities Agency (IEUA) is in the process of building a regional recycled water system to serve the Westgate Specific Plan and other areas in Fontana. The Westgate Specific Plan infrastructure plans require that a reclaimed water "purple pipe" system be installed in medians for all major streets, parkways and public parks. It will be connected to the IEUA recycled water system upon its completion. The proposed recycled water system for the Westgate Specific Plan, which would serve future uses on-site, is illustrated below in **Figure 4.O.1-2**, *Recycled Water Master Plan*.



PCR

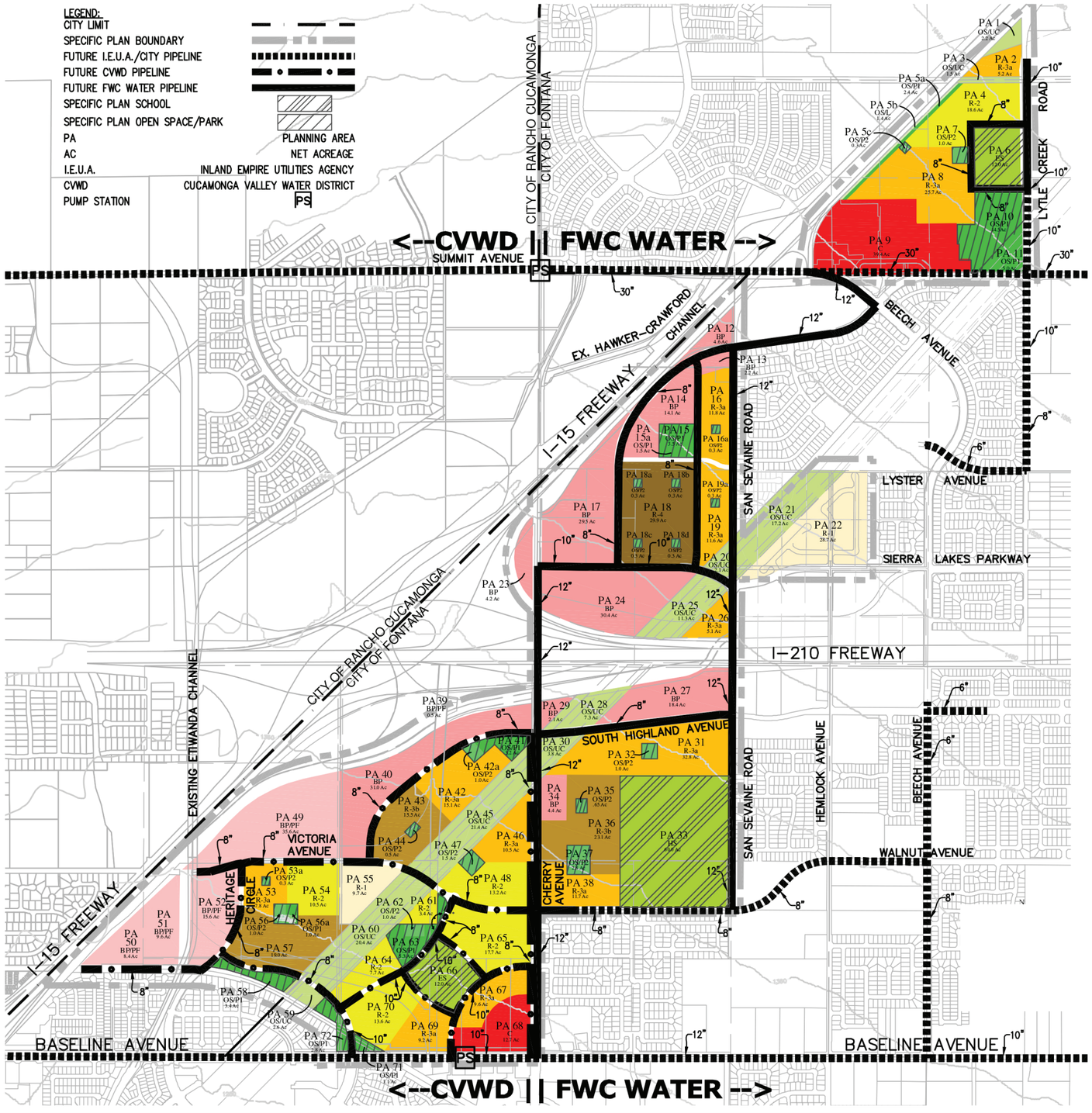
Water Master Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE

4.0.1-1



PCR

N

0 1500 Feet

Recycled Water Master Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE **4.O.1-2**

d. Analysis of Project Impacts

(1) Water Infrastructure

Threshold	Would the project require or result in the construction of new water facilities or the expansion of existing facilities, the construction of which would cause significant environmental effects?

Impact 4.0.1-1 *Implementation of the proposed project would require or result in the construction of new water facilities or the expansion of existing facilities, the construction of which would not cause significant environmental effects. This impact is considered less than significant.*

The *Westgate Specific Plan Infrastructure Study* (Appendix L of this Draft EIR), was prepared to provide a general estimate of the water distribution infrastructure necessary to serve land uses to be constructed pursuant to the proposed Specific Plan. The intent of the domestic water analysis contained in the *Westgate Specific Plan Infrastructure Study* is to determine preliminary sizing and alignments for the domestic water infrastructure required to support future development of the proposed project.

As noted in the infrastructure study, it is assumed that the delivery of domestic water can be provided by the CVWD and FWC infrastructure currently in place near the project site. Domestic water pipeline sizes shown in Figure 4.O.1-1 were determined using engineering judgment, and are roughly based on extending the existing line sizes to serve the Specific Plan area. Existing water lines are prevalent around the Specific Plan area, which allows new water lines for future development to have multiple points of connection to the existing facilities. Pipeline sizes were compared against system demands placed on each pipeline to validate the sizing recommendations. In general, as shown above in Figure 4.O.1-1, new water lines are proposed to extend what exists today, matching line sizes and completing the loops where necessary. As future development proposals for the Specific Plan area are received by the City in the future, each project would be reviewed to ensure that adequate water conveyance infrastructure exists to serve each development. Thus, impacts related to water distribution capacity would be less than significant.

(2) Water Supply

Threshold	Would the project have sufficient water supplies available to service the project from existing entitlements and resources, or are new expanded entitlements needed?

Impact 4.0.1-2 *Sufficient water supplies are available to service the project from existing entitlements and resources, and no new or expanded entitlements are needed. This impact is considered less than significant.*

(a) Fontana Water Company Service Area

(i) Future Water Demand for Fontana Water Company

FWC's 2010 UWMP was completed in June 2011 and includes water demand projections for FWC over the next 25 years (until 2035). The water demands for the Westgate Specific Plan area addressed by the FWC WSA are included in the 2010 UWMP projections, which assume buildout of proposed uses under the adopted 1996 Specific Plan. However, the FWC WSA also accounts for the additional growth associated with the current Specific Plan proposal, which was added to the projected water demands of the adopted Specific Plan and compared to available future supplies through 2035. Water demands projected in FWC's 2010

UWMP and the additional project-related water demand were calculated based on the urban per capita water use target developed per the Water Conservation Bill of 2009 (SBX7-7) and population projections within FWC's service area.

Methodologies for calculating urban per capita water use were published by DWR in its October 2010 guidance document.[15] The methodology applied to FWC included an urban per capita water use reduction of 10 percent, by 2015, and of 20 percent, by 2020. DWR's guidance document was used by FWC to calculate urban per capita water use targets of 197 gallons per capita day (a target of 178 gallons per capita day was used in FWC's 2010 UWMP), by 2015, and 175 gallons per capita day, by 2020.

The projected water demands for the Westgate Specific Plan are based on the urban per capita water use targets and population projections. The proposed project is estimated to include 5,410 residential dwelling units, which is an increase of 3,072 residential units compared to the adopted 1996 Specific Plan. According to the U.S. Census' "2010 Demographic Profile Data", there is an average of 3.98 people for owner-occupied or renter-occupied households within the City of Fontana. Based on U.S. Census data, the projected total residential population of the entire proposed project is approximately 21,532 (or 5,410 x 3.98). Total projected water demands for the Westgate Specific Plan, as well as those of the previously approved (1996) Westgate Specific Plan, are provided below in **Table 4.O.1-7**, *Proposed Project Water Demand Estimates for Fontana Water Company*. The projected water demands in normal years for FWC's service area including the entire proposed project, during the next twenty years, are summarized in **Table 4.O.1-8**, *Fontana Water Company's Future Water Demands With Proposed Project In Normal Years*. It should be noted that since the portion of the Specific Plan area west of Cherry Avenue is located within CVWD's service area, the project-related water demands for FWC presented in Table 4.O.1-6 are considered conservative.

(ii) Water Supply Impacts for Fontana Water Company Service Area

Based on the above discussion of the available water supply sources, FWC's water supply-demand balance in normal, single dry, and multiple dry years during the next 20 years are summarized below in **Table 4.O.1-9**, *Fontana Water Company's Future Water Supplies in Normal Years (AFY)*, **Table 4.O.1-10**, *Comparison of Fontana Water Company 2015 Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)*, and **Table 4.O.1-11**, *Fontana Water Company's Comparison of Twenty Year Projection (2035) Of Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)*.

The Chino Basin is an important source of groundwater for FWC now and will continue to be in the future. In addition, the Chino Basin Watermaster's Optimum Basin Management Program will greatly increase the Chino Basin's reliability and safe yield through recharge of imported water, additional local storm water, and recycled water. Based on information from the FWC's 2010 UWMP, FWC currently has a total pumping capacity from the Chino Basin of approximately 37,600 gallons per minute (gpm), or approximately 60,650 AFY based on continuous operations. At the present time FWC has nine wells (with a total pumping capacity of approximately 18,000 gpm or 29,100 AFY) which cannot be used because of high levels of perchlorate and nitrate contamination.

FWC is planning to restore most, if not all of the lost pumping capacity in the Chino Basin through construction of additional wells or installing wellhead treatment on existing wells in the near future. FWC is

[15] *California Department of Water Resources, Division of Statewide Integrated Water Management, Water Use and Efficiency Branch. Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use. October 1, 2010.*

Table 4.O.1-7

Proposed Project Water Demand Estimates for Fontana Water Company

	Year			
	2020	**2025**	**2030**	**2035**
1996 Westgate Specific Plan [a,b]				
Dwelling Units Within FWC Service Area	427	854	1,280	1,280
Water Demand Within FWC Service Area (AFY) [c]	333	666	999	999
Dwelling Units Outside FWC Service Area	353	706	1,058	1,058
Water Demand Outside FWC Service Area (AFY) [d]	275	551	825	825
Total Project Dwelling Units	780	1,560	2,338	2,338
Total Demand of 1996 Westgate Specific Plan (AFY)	**609**	**1,217**	**1,824**	**1,824**
2013 Westgate Specific Plan [a,b]				
Additional Dwelling Units Within FWC Service Area	848	1,697	2,545	2,545
Additional Water Demand Within FWC Service Area (AFY) [d]	662	1,324	1,986	1,986
Additional Dwelling Units Outside FWC Service Area	176	352	527	527
Additional Water Demand Outside FWC Service Area (AFY)[d]	137	275	411	411
Total Additional Project Dwelling Units	1,024	2,049	3,072	3,072
Total Demand of 2013 Westgate Specific Plan (AFY)	**799**	**1,599**	**2,397**	**2,397**
Combined 1996 and 2013 Westgate Specific Plan				
Total Dwelling Units	**1,804**	**3,609**	**5,410**	**5,410**
Total Project Water Demand	**1,407**	**2,816**	**4,221**	**4,221**

AFY = acre-feet per year (approximately 326,000 gallons)

[a] *Build out of the Westgate Project is projected over 15 years, beginning after 2015 and completed by 2030.*

[b] *Water Demand Calculation = (number of dwelling units) x (3.98 people reported by U.S. Census 2010 Demographic Profile for the City of Fontana) x (175 gallons per capita per day reported in FWC 2010 UWMP) x (365 days per year) / (325,851 gallons per acre-feet).*

[c] *Included in demand projections reported in FWC 2010 Urban Water Management Plan.*

[d] *Not included in demand projections reported in FWC 2010 Urban Water Management Plan.*

Source: Fontana Water Company, 2014

also planning to replace existing aging and poor producing wells, which will result in a net increase in production over existing capacity. Additional well capacity will provide emergency water supply in case of interruptions of water service due to migration of contamination, loss of power, physical damage to electrical power supply equipment, or failure of a water transmission pipeline.

As summarized in Tables 4.O.1-8, 4.O.1-9, and 4.O.1-10, water supplies available to FWC will be sufficient to meet all present and future water supply requirements of the Westgate Specific Plan for the next twenty years and through 2035, including during single and multiple dry years. As discussed previously, Planning Area 24 could be developed with as many as 20.0 acres of R-4 high density residential uses with a density up to 50 dwelling units per acre, thus replacing MU-1 mixed use land use designation in that portion of the Planning Area. This would result in the development of an additional 1,000 residential units, and removal of 20.0 acres of Mixed Use-1 business park uses, which would occur entirely within the FWC service area.

Table 4.O.1-8

Fontana Water Company's Future Water Demands With Proposed Project In Normal Years

Year	2020	2025	2030	2035
FWC Projected Water Demands (AFY) [a]	44,613	47,572	50,532	53,741
Additional Project Demands Within FWC Service Area (AFY) [b]	662	1,324	1,986	***1,986***
Additional Project Demands Outside FWC Service Area (AFY) [c]	413	825	1,237	1,237
Total FWC Demands With 2013 Westgate Specific Plan (AFY)	**45,687**	**49,721**	**53,754**	**56,963**

AFY = acre-feet per year (approximately 326,000 gallons)

[a] *Demand projections reported in FWC 2010 UWMP, Table 8 which includes full build out of the 1996 Westgate Specific Plan Project located within FWC service area.*

[b] *Based on additional residential dwelling units proposed in the 2013 Westgate Specific Plan located within FWC service area.*

[c] *Based on residential dwelling units reported in the 1996 Westgate Specific Plan and additional residential dwelling units proposed in 2013 Westgate Specific Plan located outside FWC service area.*

Source: Fontana Water Company, 2014

Table 4.O.1-9

Fontana Water Company's Future Water Supplies in Normal Years (AFY)

Year		2015	2020	2025	2030	2035
FWC Projected Water Demands [a]		42,519	44,613	47,572	50,532	53,741
Additional Project Demands [b]		0	1,074	2,149	3,222	3,222
FWC Projected Water Demands With 2013 Westgate Specific Plan		42,519	45,687	49,721	53,754	56,963
Water Supplies [c]	Surface Water	5,700	5,700	5,700	5,700	5,700
	Lytle Basin	9,400	9,400	9,400	9,400	9,400
	Chino Basin	5,319	7,487	10,521	13,554	15,263
	Rialto Basin	7,600	7,600	7,600	7,600	7,600
	No-Man's Land	6,000	6,000	6,000	6,000	6,000
	Recycled Water	1,500	2,500	3,500	4,500	6,000
	Imported Water from SBVMWD	2,000	2,000	2,000	2,000	2,000
	Imported Water from IEUA	5,000	5,000	5,000	5,000	5,000
	Total	**42,519**	**45,687**	**49,721**	**53,754**	**56,963**

AFY = acre-feet per year (approximately 326,000 gallons)

[a] *Demand projections reported in adopted FWC 2010 UWMP, Table 8 including demands from the adopted 1996 Westgate Specific Plan located within FWC service area.*

[b] *Based on the proposed 2013 Westgate Specific Plan, additional Project demands located within and outside FWC service area were not included in adopted FWC 201O UWMP, Project start-up assumed after 2015.*

[c] *Water supplies reported in adopted FWC 201O UWMP except groundwater totals for Chino Basin were adjusted in 2020 and thereafter to supply the additional demands from proposed 2013 Westgate Specific Plan.*

Source: Fontana Water Company, 2014

Table 4.O.1-10

Comparison of Fontana Water Company 2015 Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)

Demand and Supply		Normal Year	Single Dry Year[b]	Multiple Dry Years[d]		
				Dry Year 1	Dry Year 2	Dry Year 3
FWC Projected Demands [a]		42,519	44,856	45,331	43,232	40,318
Additional Project Demands [b]		0	0	0	0	0
FWC Projected Water Demands With 2013 Westgate Specific Plan		42,519	44,856	45,331	43,232	40,318
Water Supplies [c]	Surface Water	5,700	5,900	5,900	5,900	5,900
	Lytle Basin	9,400	11,400	11,400	11,400	11,400
	Chino Basin	5,319	10,856	11,331	9,232	6,318
	Rialto Basin	7,600	6,200	6,200	6,200	6,200
	No-Man's Land	6,000	6,000	6,000	6,000	6,000
	Recycled Water	1,500	1,500	1,500	1,500	1,500
	Imported Water from SBVMWD	2,000	1,000	1,000	1,000	1,000
	Imported Water from IEUA	5,000	2,000	2,000	2,000	2,000
	Total	**42,519**	**44,856**	**45,331**	**43,232**	**40,318**

AFY = acre-feet per year (approximately 326,000 gallons)

[a] *Demand projections included in adopted FWC 2010 UWMP, Table 8.*
[b] *Project start-up assumed after 2015.*
[c] *Water supplies reported in adopted FWC 2010 UWMP.*
[d] *Based on FWC's 2010 UWMP, it is estimated that a single dry year water demand is about 5.5% higher than a normal year demand, dry year 1 water demand is about 6.6% higher than a normal year demand, dry year 2 demand is about 1.7% higher than a normal year demand, and dry year 3 demand is about 5.2% lower than a normal year demand.*

Source: Fontana Water Company, 2014

The net additional water demand, based on FWC water demand factors, totals approximately 0.31 mgd or 344 AFY, which was not accounted for in the WSA prepared by FWC for the proposed Specific Plan.[16] While this additional residential development in Planning Area 24 is not considered likely to occur, it is being evaluated in this Draft EIR to represent a worst-case scenario in which maximum water demands associated with potential development are assumed. As such, actual water demands under this scenario would likely be less than 344 AFY. Nonetheless, as this additional demand was not accounted for in the FWC WSA for the proposed Specific Plan, should be City pursue implementation of R-4 residential uses within Planning Area 24, such development proposals would be required to prepare a separate WSA to ensure that adequate water supplies are available to serve proposed uses. Furthermore, as discussed below under Cumulative Impacts, the total cumulative demand of the proposed Specific Plan and related projects within the CVWD and FWC service areas, even with the addition of R-4 residential uses within Planning Area 24, would fall within the projected available water supplies for year 2035 (project buildout). As such, water supply impacts with inclusion of Planning Area 24 residential uses are considered less than significant.

[16] *Additional water demand associated with the High Density Residential Option is calculated by multiplying the additional 1,000 residential units by 307 gpd (2,690 x 307 gpd = 307,000 gpd) multiplied by 365 days per year and divided by 325,851 gallons per acre-foot, or (307,000 gpd x 365) / (325,851 g/AF) = 343.88 AFY.*

Table 4.O.1-11

Fontana Water Company's Comparison of Twenty Year Projection (2035) Of Water Supply and Demand In Normal, Single Dry, and Multiple Dry Years (AFY)

Demand and Supply		Normal Year	Single Dry Year	Multiple Dry Years [d]		
				Dry Year 1	Dry Year 2	Dry Year 3
FWC Projected Demands [a]		53,741	56,694	57,295	54,641	50,959
Additional Project Demands [b]		3,222	3.400	3,430	3,280	3,050
FWC Projected Water Demands With 2013 Westgate Specific Plan		56,963	60,094	60,725	57,921	54,009
Water Supplies [c]	Surface Water	5,700	5,900	5,900	5,900	5,900
	Lytle Basin	9,400	11,400	11,400	11,400	11,400
	Chino Basin	15,263	21,594	22,225	19,421	15,509
	Rialto Basin	7,600	6,200	6,200	6,200	6,200
	No-Man's Land	6,000	6,000	6,000	6,000	6,000
	Recycled Water	6,000	6,000	6,000	6,000	6,000
	Imported Water from SBVMWD	2,000	1,000	1,000	1,000	1,000
	Imported Water from IEUA	5,000	2,000	2,000	2,000	2,000
	Total	**56,963**	**60,094**	**60,725**	**57,921**	**54,009**

AFY = acre-feet per year (approximately 326,000 gallons)

[a] *Demand projections reported in adopted FWC 2010 UWMP, Table 8 including demands from the adopted 1996 Westgate Specific Plan located within FWC service area.*

[b] *Based on the proposed 2013 Westgate Specific Plan, additional Project demands located within and outside FWC service area were not included in adopted FWC 2010 UWMP. Project start-up assumed after 2015.*

[c] *Water supplies reported in adopted FWC 2010 UWMP except groundwater totals for Chino Basin were adjusted to supply the additional demands from proposed 2013 Westgate Specific Plan.*

[d] *Based on FWC's 2010 UWMP, it is estimated that a single dry year water demand is about 5.5% higher than a normal year demand, dry year 1 water demand is about 6.6% higher than a normal year demand, dry year 2 demand is about 1.7% higher than a normal year demand, and dry year 3 demand is about 5.2% lower than a normal year demand.*

Source: Fontana Water Company, 2014

(b) Cucamonga Valley Water District Service Area

(i) Proposed Project Water Demand for Cucamonga Valley Water District

Water demands for the CVWD service area were projected in the CVWD UWMP for the period from 2015 to 2035, as summarized below in **Table 4.O.1-12**, *CVWD Projected Water Demands 2015-2035*. CVWD estimates an overall increase in water demand in its service area from 48,001 AFY in 2010 to 61,900 AFY in 2035. The projected water demand accounts for compliance with the SB7X-7 mandated reduction in per capita potable demand of ten percent by 2015 and 20 percent by 2020; the landscape ordinances of the Cities of Rancho Cucamonga, Fontana, and Upland; and CVWD's conservation goals. Non-revenue water is assumed to be six percent of total demand in future years. No exports or water sales to neighbor water agencies are included in the demand projection, though the water consumption projection consists of both potable and non-potable water usage.

Although CVWD's 2010 UWMP took into account all potential development to determine sound future water projections, a conservative approach was taken by CVWD for the Westgate Specific Plan WSA. The total

Table 4.O.1-12

CVWD Projected Water Demands 2015-2035

	2015	2020	2025	2030	2035
Consumption (AFY)[a]	54,144	52,922	54,614	56,494	58,186
Non-Revenue Water[b]	3,456	3,378	3,486	3,606	3,714
Total Demand	57,600	56,300	58,100	60,100	61,900

[a] *Inclusive of conservation savings*
[b] *Assumed to be 6% of demands for projection period.*

Source: PCR Services Corporation, 2014

buildout of Westgate Village (the portion of the proposed Specific Plan within CVWD's service area) was added to the values determined in the UWMP to demonstrate CVWD's ability to meet the demands of the development, as shown in **Table 4.O.1-13**, *Projected Water Demands 2015-2035 with Westgate Village*.

Table 4.O.1-13

Projected Water Demands 2015-2035 with Westgate Village

	2015	2020	2025	2030	2035
Consumption (AFY) [a]					
2010 UWMP	54,144	52,922	54,614	56,494	58,186
Westgate Village[a]	1,200	1,200	1,200	1,200	1,200
Subtotal consumption	55,344	54,122	55,814	57,694	59,386
Non-Revenue Water[b]					
2010 UWMP	3,456	3,378	3,486	3,606	3,714
Westgate Village[c]	0	0	0	0	0
Subtotal consumption	3,456	3,378	3,486	3,606	3,714
Total Demand	58,800	57,500	59,300	61,300	63,100
Percent demand increase	2%	2%	2%	2%	2%

[a] *Inclusive of conservation savings*
[b] *Assumed to be 6% of demands for projection period.*
[c] *Provided by the applicant's engineer, Hall and Foreman, Inc.*

Source: Cucamonga Valley Water District, 2012.

Based on the projected total CVWD demand including the Westgate Village development, water demands for the normal year, single dry year, and multiple-dry year hydrologic conditions are summarized below in **Table 4.O.1-14**, *Water Supply and Demand Comparison for Normal Hydrologic Condition with Westgate Village*, **Table 4.O.1-15**, *Water Supply and Demand Comparison for Single-Year Condition (2004) - Westgate Village*, and **Table 4.O.1-16**, *Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition with Westgate Village*, respectively.

Table 4.O.1-14

Water Supply and Demand Comparison for Normal Hydrologic Condition with Westgate Village

Supply / Demand (AFY)	2015	2020	2025	2030	2035
Total Supply from Table 4.1	65,101	65,938	66,188	66,438	66,688
Total Demand with Westgate Village	58,800	57,500	59,300	61,300	63,100
Surplus/Shortage	6,301	8,438	6,888	5,138	3,588
Surplus/Shortage as % of Supply	10%	13%	10%	8%	5%
Surplus/Shortage as % of Demand	11%	15%	12%	8%	6%

Source: Cucamonga Valley Water District, 2012.

Table 4.O.1-15

Water Supply and Demand Comparison for Single-Year Condition (2004) - Westgate Village

Supply / Demand (AFY)	2015	2020	2025	2030	2035
Total Supply from Table 4.2	61,607	61,857	63,727	63,977	64,227
Total Demand with Westgate Village	58,800	57,500	59,300	61,300	63,100
Surplus/Shortage	2,807	4,357	4,427	2,677	1,127
Surplus/Shortage as % of Supply	5%	7%	7%	4%	2%
Surplus/Shortage as % of Demand	5%	8%	7%	4%	2%

Source: Cucamonga Valley Water District, 2012.

Table 4.O.1-16

Water Supply and Demand Comparison for Multiple-Dry Year Hydrologic Condition with Westgate Village

Year	Supply / Demand (AFY)	2015	2020	2025	2030	2035
First, Second, and Third Year of Supply	Total Supply	62,138	62,388	64,258	64,508	64,758
	Total Demand with Westgate Village	58,800	57,500	59,300	61,300	63,100
	Surplus/Shortage	3,338	4,888	4,958	3,208	1,658
	Surplus/Shortage as % of Supply	5%	8%	8%	5%	3%
	Surplus/Shortage as % of Demand	6%	9%	8%	5%	3%

Source: Cucamonga Valley Water District, 2012.

(ii) Water Supply Impacts for Cucamonga Valley Water District Service Area

As demonstrated in the WSA for the Westgate Village portion of the proposed Westgate Specific Plan, CVWD will be able to provide a reliable supply of water to meet the water demands in the near and planned future. Although the 2010 UWMP accounts for ultimate build-out by 2035 and conceivably includes the demands of a development such as Westgate Village, the methodology presented in the WSA is conservative by adding the Westgate Village demands on top of build-out demands anticipated for the site in the UWMP. As shown above in Tables 4.O.1-12 through 4.O.1-15, CVWD foresees adequate supplies to meet the project's demands.

(c) Water Supply Conclusion

As demonstrated by the respective WSAs prepared by FWC and CVWD for the proposed project and summarized in the discussion above, adequate water supplies would be available to serve the proposed future development through buildout in 2035. As such, impacts related to water supply adequacy are considered less than significant and no mitigation measures are required.

(3) Consistency with Regulatory Framework

(a) California Urban Water Management Plan Act

Both FWC and CVWD are consistent with the California Urban Water Management Plan Act, as evidenced by their respective approved 2010 UWMPs. The proposed project is within the range of development anticipated in these UWMPs, which indicates that FWC and CVWD will be able to meet future demand for water.[17] Therefore, impacts would be less than significant.

(b) Senate Bill 610, Senate Bill 221 and Senate Bill 7

As indicated above, the proposed project is subject to the requirements of SB 610 as it includes the future development of more than 500 residential units, as well as the development of future projects requiring an amount of water equivalent to or greater than that required by a 500 dwelling unit project. Additionally, some future residential subdivisions pursuant to the proposed Specific Plan would also be subject to the requirements of SB 221 because they would contain more than 500 dwelling units. The proposed project will be in the service areas of the respective water suppliers who must also abide by the water conservation and planning goals of SB 7, to reduce the per capita water consumption 20 percent by 2020 statewide. As future development would be required to comply with the provisions of SB 610, SB 221, and SB 7, as applicable, impacts in this regard would be less than significant.

(c) California Code of Regulations

The proposed project would meet or exceed the water efficiency requirements set forth by Title 20 of the CCR through incorporation of the City's recommended water conservation measures, the project's design features, which are generally more stringent than the requirements set forth by Title 20 of the CCR. As such, the proposed project would be consistent with Title 20 and impacts would be less than significant.

---

[17] *Although the potential additional residential development in Planning Area 24 was not specifically accounted for in the FWC WSA or UWMP, the additional water demand associated with this development scenario, in conjunction with other cumulative development in the area, is within the 20-year supply projections within the CVWD and FWC services areas.*

(d) City of Fontana General Plan

The Open Space & Conservation Element of the City's General Plan identifies specific goals and policies related to water supply and conservation. **Table 4.O.1-17**, *Project General Plan Consistency*, below, discusses the Westgate Specific Plan's consistency with each of these policies in the context of water supply. As shown in Table 4.O.1-16, the proposed project would be consistent with the applicable goals and policies of the General Plan relative to water supply and impacts in this regard would be less than significant.

Table 4.O.1-17

General Plan Consistency Analysis

Open Space & Conservation Element	
Goal 3.1: Maximize efficient allocation and water resource use for existing and future water consumers.	
Policy 3.1-1: Promote use of xeric (adapted to arid conditions) landscaping techniques in master planned communities, and other new land use plans. Provide public information concerning xeric plant palettes and low water usage irrigation systems.	**Consistent.** The proposed Specific Plan includes various design features intended to reduce water demands of future development on-site, including a landscaping palette based on native species that require less irrigation. Furthermore, the project requires that efficient irrigation systems be installed for all landscaping on-site, and the use of recycled water for irrigation to the maximum extent feasible, in order to minimize potable water demands.
Policy 3.1-2: Replace existing turf areas and other high water consuming landscaping within City street medians and parkways with xeric vegetation and miscellaneous hardscape materials.	**Consistent.** The majority of the Specific Plan area is undeveloped and therefore does not contain any existing turf areas or irrigated areas with high water consumption that would be subject to replacement as part of project implementation. However, landscaping for proposed street medians and parkways would include drought-tolerant plant species and various hardscape materials, as deemed appropriate, subject to review and approval by the City.
Policy 3.1-3: Participate with the Inland Empire Utilities Agency, the Fontana Water Company, the Cucamonga County Water District, and the West San Bernardino County Water District to develop and implement water conservation programs and to encourage the use of water conserving technologies, for indoor and outdoor applications.	**Consistent.** While it is the City's responsibility to participate in water conservation programs with affected water agencies in the area, the proposed project would implement a number of water conservation measures that meet or exceed established conservation requirements.

4. CUMULATIVE IMPACTS

a. Water Infrastructure

Development of the proposed project in conjunction with the four related Specific Plan projects identified in Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR, would cumulatively increase distribution demands on the existing water infrastructure system. However, each related project would be subject to discretionary

review to assure that the existing public utility facilities would be adequate to meet the domestic and fire water demands of each project. Furthermore, the City of Fontana, FWC, CVWD, and IEUA all conduct ongoing evaluations to ensure facilities are adequate to meet anticipated growth in the respective service areas. Therefore, cumulative impacts on the water infrastructure system would be less than significant.

b. Water Demand

As discussed above, FWC and CVWD, as public water service providers, are required to prepare and periodically update their respective UWMPs to plan and provide for water supplies to serve existing and projected demands. The UWMPs prepared by FWC and CVWD account for existing development within their service areas, as well as projected growth anticipated to occur through redevelopment of existing uses and development of new uses. Additionally, under the provisions of SB 610, FWC and CVWD are required to prepare a comprehensive WSA for each new development "project" (as defined by Section 10912 of the CWC) within their service areas. The types of projects subject to the requirements of SB 610 tend to be larger projects (i.e., residential projects with at least 500 dwelling units, shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space, commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space, etc.) that may or may not have been included within the growth projections of the UWMP. The WSAs for such projects, in conformance with the UWMP, evaluate the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and measures to secure alternative sources if needed. In addition, as described above, SB 221 requires that for residential subdivisions with 500 units or more that are in non-urban areas, written verification from the service provider (i.e., FWC or CVWD) be submitted indicating sufficient water supply is available to serve the proposed subdivision, or the local agency shall make a specified finding that sufficient water supplies are or will be available prior to completion of the project.

Chapter 3, *Basis for Cumulative Analysis*, of this Draft EIR identifies four related projects all located in the City of Fontana that are anticipated to be developed within the vicinity of the project site. None of these projects are located within the service area of CVWD, and only a portion of two of the projects is within the FWC service area. Nonetheless, these four related projects would cumulatively contribute, in conjunction with the proposed project, to water demand in the project area. As shown in **Table 4.0.1-18**, *Estimated Cumulative Water Demand*, related projects in conjunction with the proposed Westgate Specific Plan would have an average daily water demand of approximately 4.94 mgd or 5,534 AF per year, which includes the additional demand associated with potential development of R-4 residential uses within Planning Area 24. As stated above, the FWC and CVWD's 2010 UWMPs project that total yearly water demand will increase from 101,319 AF in 2015 to 116,841 AF in 2035, which is an increase of 15,522 AF or 15.3 percent over that 20-year period. With the anticipated water demand increase of 5,534 AF per year from the development of the proposed project and related projects, the demand for water would fall within the available and projected water demand presented in the FWC and CVWD 2010 UWMPs.

The City of Fontana is faced with various ongoing challenges in securing its future water supplies due to among other things droughts, environmental restrictions, and climate change. FWC and CVWD are planning to overcome these challenges by expanding their water conservation efforts through public education, installing high efficient water fixtures, providing incentives, and expanding the City's outdoor water conservation program. To increase recycled water use, FWC and CVWD are expanding the recycled water distribution system to provide water for irrigation, industrial use, and groundwater recharge. Furthermore,

Table 4.O.1-18

Estimated Cumulative Water Demand

Related Project	Residential (units)	Office (acres)	Retail (acres)	Industrial (acres)	School (acres)	Park (acres)	
Arboretum Specific Plan	3,526	-	8.8	-	46.0	31.0	
Ventana Specific Plan	842	8.3	4.9	-	-	-	
Summit at Rosena Specific Plan	856	-	1.0	-	12.0	22.0	
Citrus Heights North Specific Plan	530 [a]	-	-	-	-	9.0	
Subtotal Related Projects	*5,754*	*8.3*	*14.7*	*0.0*	*58.0*	*62.0*	
Proposed Project [c]	***6,410***	***120.7***	***55.3***	***92.0***	***84.0***	***57.0***	
TOTAL	**12,164**	**129.0**	**70.0**	**92.0**	**142.0**	**119.0**	
Cumulative Water Demand Estimate [b]							**Total**
Total Water Demand (mgd)	3.73	0.43	0.23	0.30	0.22	0.03	**4.94**

Notes: mgd = million gallons per day

[a] *The Citrus Heights North Specific Plan was approved for a total of 1,154 residential units (606 single-family and 548 multi-family); however, approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed, resulting in 530 units yet to be constructed.*

[b] *Water demand factors are based on City of Fontana 2000 Sewer Master Plan generation rates, plus 10% to account for outdoor water use, as presented in the "Westgate Specific Plan Infrastructure Study" provided as Appendix L to this Draft EIR. Rates applied include 307 gallons per day (gpd) per residential dwelling unit, 3,300 gallons per day per acre of retail, office, and industrial uses, 2,640 gpd per acre of schools, and 220 gpd per acre of parks.*

[c] *Maximum residential units would total 6,410 units if R-4 residential uses are developed in Planning Area 24, and thus office uses would total 120.7 acres, and industrial uses would total 92.0 acres; all other totals would remain as proposed in the Specific Plan.*

Source: PCR Services Corporation, 2014 and Hall & Foreman, Inc., 2011.

given that the UWMP plans and provides for water supplies to serve existing and projected needs, including those of future growth and development as may occur through related projects, and that the requirements of SB 610, SB 221 and SB 7 provide means to ensure that the water supply needs of large development projects are carefully considered relative to FWC's and CVWD's ability to adequately meet future needs, it is anticipated that FWC and CVWD would be able to supply the demands of the proposed project and related projects through the foreseeable future. In addition, compliance with the City's recommended water conservation measures would reduce the water consumption estimates of the proposed project and related projects, thereby reducing the demand on overall supplies available to the City.

In sum, FWC and CVWD would have adequate amounts of water to meet future water demands for the service area with the addition of the proposed project and related projects, and no significant cumulative impacts related to water demand would occur and the proposed project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

Based on the analysis above, the proposed project would not result in significant impacts related to water supply. However, although no mitigation measures would be required, the following mitigation measures

included in the City of Fontana 2003 General Plan EIR (GP EIR) are applicable to the proposed project and would be implemented, as appropriate, to ensure that impacts to water supply remain less than significant.

Mitigation Measure O-1: The City shall work closely with water supply agencies to assure the continued supply of water. [GP EIR MM W-1]

Mitigation Measure O-2: The City shall act to conserve water in whatever cost-effective ways are reasonably available. [GP EIR MM W-2]

Mitigation Measure O-3: The City shall manage urban runoff to minimize water supply contamination. [GP EIR MM W-3]

Mitigation Measure O-4: The City shall collaborate with water management authorities to devise and implement creative and cost-effective water management strategies. [GP EIR MM W-4]

Mitigation Measure O-5: The City shall provide educational material to its residents and businesses regarding the critical necessity for careful use of water and management of water systems. [GP EIR MM W-5]

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

As indicated above, the proposed project's impacts to water supply and infrastructure would be less than significant.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
O. UTILITIES
2. WASTEWATER

1. INTRODUCTION

This section addresses potential impacts on existing wastewater infrastructure and treatment facilities and whether sufficient capacity is available to serve project demand. Consistency with relevant goals and ordinances is also discussed. The following analysis is based in part on a sewer study included in the *Westgate Specific Plan Infrastructure Study*, prepared by Hall & Foreman, Inc. in January 2011, which is contained in Appendix L of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Inland Empire Utilities Agency

The Inland Empire Utilities Agency (IEUA) was created in 1950 by popular vote with the mission to supply supplemental water to the Chino Basin. Since then, IEUA expanded its areas of responsibility from a supplemental water supplier to a regional wastewater treatment agency, including domestic and industrial wastewater disposal systems and energy recovery and production facilities. IEUA's vision is to promote water conservation, water recycling, groundwater management, organic composting, renewable energy, and overall environmental stewardship in partnership with the communities served. IEUA provides its seven member agencies with wastewater treatment, recycled water, and biosolids treatment. The member agencies include the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and the Cucamonga Valley Water District (CVWD). IEUA's five-member Board of Directors is elected to represent approximately 850,000 residents within the IEUA's service area.

The IEUA operates two independent sewer collection systems – The Regional Sewer System (RSS), which serves to convey primarily domestic wastewater to one of IEUA's four regional water recycling facilities, and the Non-Reclaimable Wastewater System (NRWS), which collects and conveys wastewater containing high levels of dissolved salts outside the Agency's service area due to the restrictive salinity requirements imposed upon the Agency's RSS wastewater recycling facilities. The operation and maintenance of these two systems are the responsibility of the IEUA's Pretreatment and Source Control (PT&SC) Department's Collections System Group. This group has certified operators that monitor the IEUA systems using Closed-Circuit Television (CCTV). Condition assessment conducted over the past several years revealed that the majority of both collection systems are in relatively good structural condition with minimal repairs needed.[1]

The proposed Specific Plan area is within the sewer service area of the City of Fontana and the IEUA. Fontana is a member agency of the IEUA, which provides the City off-site collection, treatment, disposal and reuse of wastewater under contract. The City is currently updating its *2000 Sewer Master Plan*. The new

[1] *Inland Empire Utilities Agency. "IEUA Sewer System Management Plan." Revised April 24, 2012.*

master plan will consider IEUA wastewater treatment capacity at their reclamation plants that serve the City, and its recycled water delivery system. The new master plan is also performing extensive flow monitoring and investigating flow factors and peaking formulas. Improved capacity projections will optimize sewer life and ensure improvement projects are scheduled in a timely manner.

The existing local wastewater collection system within the SWIP Specific Plan Update area is owned and operated by the City. Currently there is existing sewer infrastructure within Cherry Avenue, San Sevaine Road, South Highland Avenue, Summit Avenue, Lytle Creek Road, Walnut Avenue, and at the southwest corner of the project site near the Etiwanda Drainage Channel. Based on sewage generation factors provided in the City's 2000 Sewer Master Plan, existing uses within the Specific Plan boundaries currently generate an average of approximately 170,000 gallons per day (gpd) of wastewater.[2]

(2) Wastewater Treatment

Collecting and treating wastewater is a primary service that IEUA provides. The Agency's water recycling plants collectively take in approximately 70 million gallons of wastewater per day for treatment. Several treatment processes contribute to providing quality recycled water pursuant to the State of California Title 22 regulations. The major treatment processes include raw wastewater pumping, preliminary and primary treatment, primary effluent flow equalization and diversion, secondary treatment and tertiary treatment. In a continuous effort for IEUA's operations to stay committed to providing a high quality end-product through efficient, functional treatment plants, the Agency has begun to reinvest in infrastructure repairs and upgrades to the water recycling plants.[3]

All wastewater generated within the Specific Plan area is transported through regional trunk sewers to the IEUA's Regional Water Recycling Plant No. 4 (RP-4) located at 12811 6th Street in Rancho Cucamonga, approximately three miles south-southwest of the project site's southern boundary at Baseline Avenue. RP-4 includes several treatment processes that contribute to providing a quality recycle water pursuant to the State of California Title 22 regulations. The major treatment processes include raw wastewater pumping, preliminary and primary treatment, primary effluent flow equalization and diversion, secondary treatment, and tertiary treatment. In addition, each treatment processes is integrated with instrumentation and control systems for controlling and monitoring various aspects of their operations. This overall facility instrumentation and control system is called the Supervisory Control and Data Acquisition (SCADA) System. RP-4 has been in operation and producing recycled water since 1997 and currently treats an average flow of seven (7) million gallons per day (mgd). RP-4 is operated in conjunction with RP-1, located at 2450 E. Philadelphia Avenue in Ontario, to provide recycled water to users. The RP-4 facility was recently expanded to increase its treatment capacity from seven (7) mgd to 14 mgd, with a planned ultimate capacity of 28 mgd.[4,5]

---

[2] *Based on a generation factor of 3,000 gallons per day (gpd) for Office and Retail uses, and assumes 39.4 acres for Falcon Ridge Town Center retail uses, 12.2 acres for the Caltrans Southern Regional Lab, and 5.4 acres for the multi-tenant office use at 6101 Cherry Avenue. Sewage rates provided in the Westgate Specific Plan Infrastructure Study (Appendix L of this Draft EIR).*

[3] *Inland Empire Utilities Agency. "2012/2013 Annual Report." http://www.ieua.org/news_reports/docs/reports/2013_Annual_Report.pdf. 2013*

[4] *Inland Empire Utilities Agency. "2010 Urban Water Management Plan." June 1, 2011. http://www.ieua.org/news_reports/UWMP.html*

[5] *Inland Empire Utilities Agency. "Facilities." http://www.ieua.org/departments/CAP/facilities.html. Accessed August 2012.*

While RP-4 receives wastewater flows from the project site and other upstream areas (e.g., San Bernardino), because the IEUA wastewater treatment system is interconnected, influent flows that exceed the treatment capacity of any one facility are bypassed to other downstream treatment plants as capacity allows.[6] According to the IEUA, during Fiscal Year 2012/2013 the total treated influent flow for the IEUA treatment system was 55.3 mgd with a total treatment capacity of 85.7 percent (or 65 percent of system capacity), while the projected flow for Fiscal Year 2022/2023 is estimated to be 64.7 mgd (or 76 percent of system capacity without additional future expansions).[7] As such, the IEUA treatment system would have an estimated treatment capacity surplus of 21 mgd for Fiscal Year 2022/2023, even if no further system improvements are implemented.

b. Regulatory Framework

(1) State Water Resources Control Board

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted Order No. 2006-0003, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (WDR). All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publically owned treatment facility in the State of California are required to comply with the terms of this Order. The principal requirement of the WDR is for each system owner to develop and implement a system-specific Sewer System Management Plan (SSMP). The IEUA SSMP was prepared in order to meet the requirements of Order No. 2006-0003 issued on May 2, 2006.

(2) Inland Empire Utilities Agency

(a) Program Master Planning and Integrated Water Resources Management[8]

IEUA's Wastewater Facilities Master Plan (WFMP) was adopted in August 2002 with the approval of the Regional Technical and Policy Committees. The WFMP, together with the Recycled Water Feasibility Study (2002) and the Organics Management Strategy Business Plan (2002), formed a "Program Master Plan" and were the subject of a Programmatic Environmental Impact Report (PEIR) certified on June 28, 2002. This TYCIP is consistent with the IEUA's approved WFMP and PEIR. The PEIR integrated all of the Agency's related planning activities into one comprehensive document in order to address the environmental concerns of the overall effects of the projects contemplated by the Agency. Since 2002, the need to integrate all of the Agency's master planning activities into Chino Basin's overall water supply management strategy has become even more apparent. In 2008 and 2009, there has been a profound shift in California Water Supply Planning in response to three consecutive years of drought and regulatory restrictions on pumping imported water from the Bay-Delta. In addition, rising energy costs, economic recession, climate change, greenhouse gas emission reduction legislation, and drought allocation plans have led to decreased imported water reliability and a call from the Governor to reduce per capita water demand by 20% to 30%. This has

---

6 *Inland Empire Utilities Agency. "Fiscal Year 2013/14 Operating and Capital Program Budget Volume 2: Ten-Year Capital Improvement Plan." http://www.ieua.org/news_reports/docs/2013/Fin/TYCIP_May2013.pdf. May 2013.*

7 *Ibid.*

8 *Inland Empire Utilities Agency. "2010 Urban Water Management Plan." June 1, 2011. http://www.ieua.org/news_reports/UWMP.html*

led to increased involvement of IEUA with the development of regional planning documents and State of California Planning Documents.

Wastewater Facilities Master Plan

Some of the objectives of the 2002 WFMP were to: (1) identify facilities that need to be replaced or expanded in the near- and long-term to meet projected growth and wastewater flow needs; (2) develop a cost-effective, phased implementation plan; (3) determine space and location needs for additional or expanded treatment facilities; (4) develop strategies for flow diversion between service areas to optimize existing treatment capacity utilization; and (5) maximize water recycling, energy efficiency, and organics recycling. The WFMP included plans for expansion of wastewater facilities to meet the needs of growth within the service area through 2050. Specifically, it included improvements and expansion of wastewater facilities at RP-4; construction of a new 16.3-MGD permitted capacity wastewater facility at RP-5; conversion of RP-2 to a solids handling facility only (elimination of wastewater treatment at RP-4); and numerous upgrades and odor control facilities at RP-1 and Carbon Canyon RWRF. These plans have all been implemented. In addition, a new, state-of-the art composting facility was put into service near RP-4 that handles biosolids and green waste; a demonstration renewable energy facility was constructed at RP-5; a new, LEED-Platinum administration building and wetlands educational park were constructed near RP-5; the recycled water system was expanded to include additional recycled water pump stations, pipelines, and reservoirs in the northeast and central areas; and organics management facilities were constructed for handling biosolids, manure, and food waste in the southern area.

(b) IEUA Ordinances

The IEUA Regional and NRWS collection systems are governed by two ordinances – Regional Wastewater System Ordinance No. 87 and the NRWS Ordinance No. 62. The regional wastewater system is a collection and conveyance system providing service for primarily residential neighborhoods with some commercial and industrial dischargers that meet the IEUA's pretreatment discharge local limits. The NRWS is a collection and conveyance system dedicated to industrial wastewater discharges containing high levels of dissolved salts. This system is composed of two independent sub-systems – The Santa Ana Regional Interceptor (SARI) which is owned by the Santa Ana Watershed Project Authority (SAWPA) that discharges to the Orange County Sanitation Districts (OCSD) and the North NRWS that discharges to County Sanitation District of Los Angeles County (CSDLAC).

(i) Regional Wastewater System Ordinance No. 87

Ordinance No. 87 objectives are to provide maximum beneficial use of the Regional Sewerage System, ground water resources and effluent receiving waterways by preventing the introduction of pollutants which may harm or interfere with the collection system and the operation of the wastewater recycling facilities. This Ordinance covers wastewater discharge requirements such as permitting, discharge prohibitions, compliance monitoring, and enforcement. IEUA operates its pretreatment program pursuant to the legal authority contained in Ordinance No. 87, enforceable in Federal, State, or local courts, which authorizes or enables IEUA to apply and enforce the requirements of Sections 307(b) and (c), and 402(b)(8) of the Clean Water Act and any regulations implementing those sections. The IEUA approved pretreatment program designates IEUA as the primary control authority for Significant Industrial Users (SIUs) within IEUA's service area that includes the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland and the Cucamonga Valley Water District, collectively known as the Regional Contracting Agencies (RCAs). IEUA and the RCAs use a standardized format for enforcement response plans and control mechanisms. IEUA and the RCAs have

contractual agreements in place to acknowledge IEUA as the control authority having oversight of the regional pretreatment program. As required by the RWQCB, IEUA and the RCAs have developed region wide pretreatment mechanisms that are consistent and uniform throughout the IEUA service area.

(ii) Non-Reclaimable Wastewater System (NRWS) Ordinance No. 62

Ordinance 62 objectives are to provide maximum beneficial use of the NRWS by preventing the introduction of pollutants which may harm or interfere with the collection system and the operation of the OCSD and CSDLAC wastewater treatment plants. This ordinance covers the general discharge requirements such as permitting, discharge limitations, compliance monitoring, and enforcement.

(c) Permits

Any entity who wants to discharge into the IEUA sewer system must first obtain and maintain a valid permit. Any discharge without a valid permit is considered an illegal discharge and is subject to enforcement action under the terms and conditions of the IEUA Ordinance. A permit applicant must submit documents with relevant information regarding the source, strength, and volume of the wastewater generated; the proposed alignment of the sewer conveyance system to the IEUA trunk lines, proper design and construction of the system, etc. The information is then evaluated by the engineering office engineer and pretreatment permit engineer. Only when it meets the IEUA requirements is a permit with discharge limits issued to the applicant.

(3) City of Fontana

(a) City of Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the City's General Plan contains various goals and policies related to wastewater and related infrastructure, which are intended to facilitate the safe and efficient operation of the City's sewage collection system, as well as the expansion/extension of necessary facilities to serve new development within the City.

(b) City of Fontana Municipal Code

Chapter 23, *Sewers and Sewage Disposal*, of the Fontana Municipal Code (FMC) regulates the ongoing maintenance and expansion of the City's sewer system, which serves the City's residents and connects to the IEUA trunk sewer system. This Chapter specifies sewer connection fees and other charges related to expansion and enhancement of the existing system for new developments.

3. PROJECT IMPACTS

a. Methodology

The wastewater generation of the proposed project was estimated using wastewater generation factors provided by the City of Fontana's *2000 Sewer Master Plan*. The project's estimated increase in wastewater flow was then compared to the existing conditions to assess the capacity of the existing sewer system and the ability of the system to accommodate the additional flows, with detailed wastewater generation and sewer pipe sizing and capacity data provided in the *Westgate Specific Plan Infrastructure Study* (Appendix L of this Draft EIR). In order to evaluate treatment capacity, the project's estimated wastewater generation

and projected average dry water flow is compared with the available treatment capacity within the IEUA treatment system at project buildout in 2035; however, to be conservative, this analysis relies on the IEUA current treatment system capacity of 85.7 mgd versus the ultimate capacity in 2035, as the timing of future improvements is not currently known. Cumulative wastewater generation is also compared with the available capacity of the IEUA treatment system using the average dry water flow, as the related projects being considered in the cumulative analysis would also be served by these facilities.

b. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including wastewater generation. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact relative to wastewater generation would occur if the project would result in one or more of the following:

Threshold 1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (refer to Impact Statement 4.O.2-1 below);

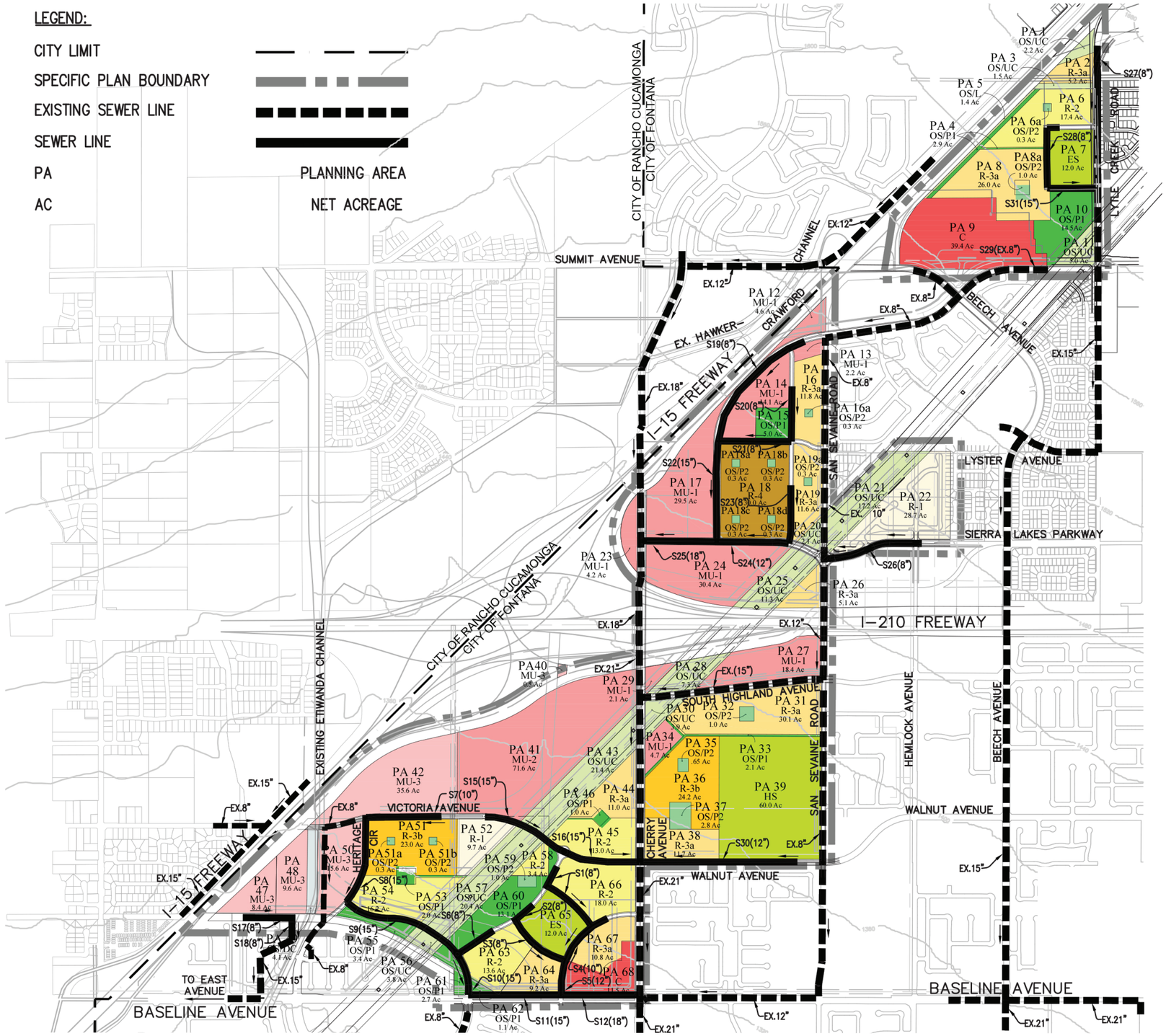
Threshold 2: Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects (refer to Impact Statement 4.O.2-1 below); or

Threshold 3: Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (refer to Impact Statement 4.O.2-1 below).

c. Project Design Features

The proposed project would be implemented over a period of over 20 years and as such infrastructure, including sewer lines and related facilities, would be constructed on-site as development occurs in order to meet associated demands. As discussed in the *Westgate Specific Plan Infrastructure Study* (Appendix L of this Draft EIR), sewer pipe size requirements have been calculated for proposed future uses based on anticipated maximum wastewater generation. Existing sewer facilities in the project area, as well as future on-site sewer system improvements based on the calculated sewer pipe sizes noted above, are illustrated in **Figure 4.O.2-1**, *Sewer Master Plan*, below. The Westgate Specific Plan will also become one of the first large scale planned communities in the Inland Empire to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the Westgate Specific Plan will achieve significant reductions in greenhouse gas emissions, energy consumption and water use. CalGreen, for example, requires that every new building constructed in California reduce water consumption by 20 percent, and requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for large scale landscape projects. In order to further conserve resources, in addition to the above, the Westgate Specific Plan is designed to use recycled water for landscape irrigation in public parks and right-of-ways.

The IEUA is in the process of building a regional recycled water system to serve the Westgate Specific Plan and other areas in Fontana. The Westgate Specific Plan infrastructure plans require that a reclaimed water



PCR

Sewer Master Plan

Westgate Specific Plan

Source: JHA Consulting, Inc., 2014.

FIGURE **4.O.2-1**

This page is intentionally blank.

"purple pipe" system be installed in medians for all major streets, parkways and public parks. It will be connected to the IEUA recycled water system upon its completion. Implementation of water-efficient features and use of recycled water would serve to reduce water consumption and associated wastewater generation within the project area.

d. Analysis of Project Impacts

(1) Wastewater Conveyance and Treatment Capacity

Threshold	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
Threshold	Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?
Threshold	Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact 4.0.1-1 *Implementation of the proposed project would not (1) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; (2) require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or (3) result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. This impact is considered less than significant with implementation of applicable mitigation measures.*

(1) Construction

During construction of proposed future uses, a negligible amount of wastewater would be generated by construction staff. It is anticipated that portable toilets would be provided by a private company and the waste disposed of off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a point where, and at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Additionally, construction is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in IEUA wastewater planning documents such as the regularly updated Wastewater Facilities Master Plan. Therefore, construction impacts to the local wastewater conveyance and treatment system would be less than significant.

(2) Operation

(a) Wastewater Generation and Infrastructure

As calculated in the *Westgate Specific Plan Infrastructure Study*, based on wastewater generation factors provided by the City's *2000 Sewer Master Plan*, the proposed project is estimated to generate 2,537,174 gpd (2.54 mgd) of wastewater on an average day and 7,994,953 gpd (8.00 mgd) of wastewater on a peak day. However, should high density residential uses be developed on up to 20.0 acres in Planning Area 24, this total would incrementally increase by 0.14 mgd on an average day or 0.45 mgd on a peak day, for a total of 2.68 mgd and 8.45 mgd, respectively. It should be noted that this estimate is considered conservative as it is anticipated that the project's water conservation features would further reduce the wastewater generation. As indicated above and shown in Figure 4.O.2-1, the project's wastewater would be conveyed via a new and existing sewer lines under City streets, draining generally from north to south and east to west, to RP-4 for treatment (or bypassed to downstream facilities as necessary). Based on the project's *Infrastructure Study*, it was determined that wastewater conveyance capacity of existing and future sewer pipelines shown in Figure 4.O.2-1 would be sufficiently sized to accommodate sewer flows from the full buildout of the proposed project. As future development within the Specific Plan update area occurs, each developer would be required to pay standard IEUA sewer connection fees, which are utilized to fund wastewater treatment and regional wastewater conveyance improvements associated with new development. Additionally, as future development occurs, each site-specific project would be reviewed to ensure that adequate wastewater conveyance facilities exist to serve each development site. Such review would address site-specific changes in wastewater generation associated with each individual development project in order to identify the necessary wastewater infrastructure improvements for each Planning Area. As such, impacts in this regard would be less than significant upon implementation of recommended mitigation measures.

While no specific development is proposed at this time, and it is not possible to determine accurately future wastewater generation by new development in the Specific Plan area, the amount of excess capacity in the existing treatment facilities serving the City make it unlikely that the proposed project would trigger the need for new or expanded regional wastewater treatment facilities and/or exceed IEUA capacity. However, for the purposes of this analysis, it is estimated that the current available capacity at IEUA's RP-4 facility is 7 mgd (total capacity of 14 mgd minus average daily flows of 7 mgd). Based on a 7-mgd capacity surplus, the project's average daily flows of 2.68 mgd at project buildout would represent 38.3% of the remaining capacity, or 19.1% of the total treatment capacity of RP-4. However, while available capacity exists to meet projected future demands, it should be noted that RP-4 would be further expanded as necessary to meet anticipated growth in the area, to its ultimate planned capacity of 28 mgd. Although the timing of the ultimate expansion of RP-4 is not currently known, any project-related wastewater flows that exceed the treatment capacity of RP-4 would be bypassed to other downstream treatment facilities. However, if RP-4 were to be fully expanded by the time the Westgate Specific Plan is built out, the project-related wastewater flows would represent 9.6% of the treatment plant's total capacity. Nonetheless, given that adequate treatment capacity currently exists within the IEUA treatment system to meet project-related demands at project buildout, impacts related to wastewater treatment capacity would be less than significant.

(3) Consistency with Regulatory Framework

(a) City of Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the City's General Plan identifies various goals and policies related to wastewater services. **Table 4.O.2-1**, *Project General Plan Consistency*, below, discusses the Westgate Specific Plan's consistency with each of these policies in the context of wastewater conveyance and treatment. As shown in Table 4.O.2-1, the proposed project would consistent with the applicable goals and policies of the General Plan relative to wastewater and impacts in this regard would be less than significant.

Table 4.O.2-1

Project General Plan Consistency

General Plan Goal/Policy	Project Consistency Statement
Goal #5: Careful planning ensures the timely, logical and cost-effective development of infrastructure facilities in our City.	
Policy 5-1: Development and supporting infrastructure shall be phased so that contemporary infrastructure is available concurrent with the occupancy of development projects.	**Consistent.** The proposed Specific Plan includes sewer infrastructure that has been designed to accommodate future on-site development. Such improvements would be completed prior to construction and operation of proposed land uses, and as such, the proposed project would be consistent with this policy.
Policy 5-2: Development should be approved in a pattern that avoids the need to extend infrastructure excessive distances to provide service and support.	**Consistent.** The proposed project's Sewer Master Plan incorporates the existing sewer system in the area and the Specific Plan is phased to concentrate near-term development adjacent to existing infrastructure that is available to serve proposed uses. As such, substantial extension or expansion of infrastructure to remote areas is not necessary and the project would be consistent with this policy.
Policy 5-3: Infrastructure installation shall be coordinated within public rights-of-way so that multiple disruptions are avoided.	**Consistent.** To the extent feasible and appropriate, wastewater conveyance facilities would be constructed within public rights-of-way on-site to allow for ongoing maintenance or other improvements with minimal disruption to surrounding uses. The project would be consistent with this policy.
Policy 5-4: Sufficient financial support for infrastructure maintenance shall be devoted so that current levels of service, health and safety are sustained or improved.	**Consistent.** Future development on-site would be required to pay Development Fees to fund necessary sewer system improvements, and ongoing payment of property taxes and sewer service fees by future residents and businesses would serve to provide adequate financial support for sewer infrastructure. The project would be consistent with this policy.
Policy 5-5: Development within the City's sphere of influence shall be accompanied by infrastructure at the same standards as those imposed by the City.	**Not Applicable.** This policy applies to areas outside the City's corporate boundary, and therefore does not apply to the project site.
Goal #6: Our City manages its wastewater in an environmentally sound and cost-effective manner.	

Table 4.O.2-1 (Continued)

Project General Plan Consistency

General Plan Goal/Policy	Project Consistency Statement
Policy 6-1: The City's current Master Plan of Sewers shall be maintained as the basis for development of a sewerage system to serve the community.	**Consistent.** While the maintenance of the City's Sewer Master Plan is the responsibility of the City, the sewer facilities proposed for the Specific Plan area are based on the City's 2000 Sewer Master Plan and have been sized accordingly. As such, the project would be consistent with this policy.
Policy 6-2: The City's local and trunk sewer system shall be designed and operated its in close collaboration with the Inland Empire Utilities Agency.	**Not Applicable.** The City owns and operates its sewer collection system independently, but in coordination with IEUA, who provides trunk sewer connections and treatment services. The proposed project's sewer facilities would connect to City facilities and would not require collaboration with IEUA. This policy is not applicable to the proposed project.
Policy 6-3: An aggressive water-recycling program shall be established and maintained in City.	**Consistent.** While the establishment and maintenance of the City's recycled water system is the responsibility of the City, the proposed project would construct recycled water infrastructure on-site and would utilize recycled water provided by the Cucamonga Valley Water District and Fontana Water Company via IEUA wastewater treatment facilities. As such, the project would be consistent with this policy.
Policy 6-4: Sufficient financial support for wastewater system maintenance (repair, upgrade, replacement, preventive maintenance) shall be devoted so that current levels of service, health and safety are sustained or improved.	**Consistent.** The proposed project would pay requisite fees for installation of and connection to sewer facilities, while ongoing payment of property taxes and sewer service fees would ensure long-term upkeep of related facilities. As such, the project would be consistent with this policy.
Policy 6-5: Federal, State and local ordinances shall be enforced in order to comply with Clean Water Act/NPDES requirements.	**Consistent.** The proposed project would comply with all applicable requirements of the Santa Ana Regional Water Quality Control Board, including provisions related to the Clean Water Act and National Pollutant Discharge Elimination System requirements for construction and operation of proposed uses. As such, the project would be consistent with this policy. Refer to Section 4.H, *Hydrology and Water Quality*, of this Draft EIR, for a detailed discussion of the proposed project's impacts and mitigation measures related to water quality.

Source: PCR Services Corporation, 2012

(b) City of Fontana Municipal Code

As noted above, Chapter 23, *Sewers and Sewage Disposal*, of the FMC regulates the ongoing maintenance and expansion of the City's sewer system, which serves the City's residents and connects to the IEUA trunk sewer system. As required by the FMC, future development projects within the Specific Plan area would be required to pay requisite Developer Fees for new sewer connections, and residents would contribute to ongoing maintenance of City-owned facilities through payment of property taxes and other mechanisms. Currently the City charges sewer expansion fees (for new sewer construction) of $4,909 per residential unit or equivalent dwelling unit (EDU) of commercial and industrial uses, as well as a sewer connection fee (to connect to existing sewer facilities) of $876.61 per residential unit or EDU of commercial and industrial uses.[9] Given that each future development project on-site would be required to pay developer fees and comply with the City's sewer regulations, the proposed project would be consistent with the FMC and impacts would be less than significant in this regard.

4. CUMULATIVE IMPACTS

Chapter 3.0, Basis for Cumulative Analysis, of this Draft EIR identifies four related projects, all of which are located in the City of Fontana and also within the IEUA service area. Because wastewater generated within all of these project areas ultimately ends up at RP-4, all four related projects were included in this cumulative analysis. These four related projects would cumulatively contribute, in conjunction with the proposed project, to the wastewater generation in the project area. As shown in **Table 4.O.2-2,** *Cumulative Wastewater Generation*, the estimated wastewater generation associated with related projects and the proposed project on average is approximately 4.61 mgd, with a peak day flow of approximately 14.74 mgd.

As discussed above, the IEUA's RP-4 facility, which would primarily serve the proposed project and all four related projects based on their location, has a current treatment capacity of 14 mgd and a current average dry water flow of approximately 7 mgd. As such, average flows would be well within the existing treatment capacity of RP-4. However, peak flows of the proposed project and related projects at buildout would exceed the existing treatment capacity of RP-4. Nonetheless, as was discussed for the proposed project, the IEUA treatment system is interconnected such that influent flows generated within the RP-4 service area can be bypassed to other downstream facilities for treatment in the event adequate capacity is not available at RP-4. The IEUA system, even without future expansions or other system improvements, would have a projected excess treatment capacity of approximately 21 mgd during Fiscal Year 2022/2023, which is adequate to meet cumulative wastewater treatment demands.[10] It should be noted that peak flow conditions occur relatively infrequently, and as such the need to bypass flows to downstream facilities from the RP-4 service area would only occur on a temporary basis when necessary. Furthermore, as with the proposed project, the wastewater generation estimates presented in Table 4.O.2-2 do not account for reductions in wastewater generation that would occur with implementation of water conservation measures, which would serve to

[9] *City of Fontana. "Development Fees." Updated May 7, 2012.*

[10] *Inland Empire Utilities Agency. "Fiscal Year 2013/14 Operating and Capital Program Budget Volume 2: Ten-Year Capital Improvement Plan." http://www.ieua.org/news_reports/docs/2013/Fin/TYCIP_May2013.pdf. May 2013. Table 3-6: Regional System Flow and Capacity Utilization Summary (MG). Page 3-16.*

Table 4.O.2-2

Cumulative Wastewater Generation

Related Project	Residential (units)	Office (acres)	Retail (acres)	Industrial (acres)	School (acres)	Park (acres)	
Arboretum Specific Plan	3,526	-	8.8	-	46.0	31.0	
Ventana Specific Plan	842	8.3	4.9	-	-	-	
Summit at Rosena Specific Plan	856	-	1.0	-	12.0	22.0	
Citrus Heights North Specific Plan	530 [a]	-	-	-	-	9.0	
Subtotal Related Projects	*5,754*	*8.3*	*14.7*	*0.0*	*58.0*	*62.0*	
Proposed Project [b]	***6,410***	***120.7***	***55.3***	***92.0***	***84.0***	***57.0***	
TOTAL [c]	**12,164**	**129.0**	**70.0**	**92.0**	**142.0**	**119.0**	
Cumulative Wastewater Generation Estimate [d,e]							**Total**
Average Day (mgd)	3.394	0.362	0.210	0.276	0.341	0.024	**4.607**
Peak Day (mgd)	10.861	1.158	0.672	0.883	1.091	0.077	**14.742**

[a] *The Citrus Heights North Specific Plan was approved for a total of 1,154 residential units (606 single-family and 548 multi-family); however, as of Spring 2012, approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed, resulting in 530 units yet to be constructed.*

[b] *When conservatively assuming development of up to 20.0 acres of R-4 residential uses in Planning Area 24, proposed residential units would total 6,410 units, office uses would total 120.7 acres, and industrial uses would total 92.0 acres; all other totals would remain as proposed in the Specific Plan.*

[c] *Total cumulative residential units would be 12,164 units, total office acreage would be 120.7 acres, and total industrial acreage would be 92.0 acres. All other totals would remain as proposed in the Specific Plan.*

[d] *Wastewater Generation Based on City of Fontana 2000 Sewer Master Plan generation rates, as presented in the "Westgate Specific Plan Infrastructure Study" provided as Appendix L to this Draft EIR. Rates applied include 279 gallons per day (gpd) per residential dwelling unit, 3,000 gallons per day per acre of retail, office, and industrial uses, 2,400 gpd per acre of schools, and 200 gpd per acre of parks. For the purposes of a conservative analysis, peak day flows are assumed to be 3.2 times average flows.*

Source: PCR Services Corporation, 2014

reduce wastewater generation rates. For these reasons, the cumulative impacts of the project on sewer conveyance and treatment infrastructure would be less than significant and the project's contribution to such impacts would not be considerable.

5. MITIGATION MEASURES

Implementation of the following mitigation measures provided in the City's 2003 General Plan EIR (GP EIR) are applicable to the proposed Specific Plan and would be implemented, as necessary, to ensure that impacts related to wastewater services and facilities are less than significant.

Mitigation Measure O-6: The City shall maintain its current Master Plan of Sewers as the basis for development of a sewer system to serve the community. [GP EIR MM WW-1]

Mitigation Measure O-7: The City shall design and operate its local and trunk sewer system in close collaboration with the IEUA. [GP EIR MM WW-2]

Mitigation Measure O-8: The City shall establish and maintain an aggressive water recycling program. [GP EIR MM WW-3]

Mitigation Measure O-9: The City shall devote sufficient financial support for wastewater system maintenance so that current levels of service, health, and safety are sustained or improved. [GP EIR MM WW-4]

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon implementation of applicable mitigation measures, the proposed project would result in less than significant impacts with regard to wastewater.

4.0 ENVIRONMENTAL IMPACT ANALYSIS
O. UTILITIES
3. SOLID WASTE

1. INTRODUCTION

This section addresses potential project impacts on existing solid waste facilities and service systems as well as project consistency with solid waste regulations. It provides a description of the solid waste collection services, disposal facilities serving the project site, and regulatory measures intended to minimize the volume of solid waste requiring landfill disposal. Analysis within this section estimates the amount of solid waste that would be generated by the proposed project and forecasts potential impacts on existing solid waste collection and disposal facilities. The analysis presented in this section is based in part on information provided by the California Department of Resources Recycling and Recovery (CalRecycle) and the City of Fontana General Plan Public Facilities, Services & Infrastructure Element.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) County Solid Waste Management System

Each jurisdiction in the region is responsible for its own integrated solid waste management planning, implementation, monitoring, public information, budgeting, and enforcement. In some cases, these responsibilities may be delegated to a franchised hauler. The County has created franchise areas (except in the most sparsely populated area east of the City of Barstow), so that residents of unincorporated areas, particularly city spheres, can have compatible recycling services to those nearby city residents.

The Countywide disposal system includes nine landfills, 13 transfer stations, which includes five limited volume transfer operations (LVTO), owned and operated by the San Bernardino County Solid Waste Management Division and four privately owned transfer stations. The County and incorporated cities have implemented several programs to achieve the State's mandated 50% diversion requirement (see discussion of AB 939 below under Regulatory Framework). Most of the 25 jurisdictions in the County saw an increase in their diversion rate from 1995 to 2000. Those increases ranged from two percentage points to 32 percentage points in the 1995 to 2002 five-year period. Seven jurisdictions reached or exceeded the 50% goal. Two cities received a "good faith effort" designation for the year 2000. Ten other jurisdictions had a diversion rate between 41%and 50%. Six jurisdictions were between 33%, and 40% and only one was below 30%. The percentage points that are included in the most recent five-year review period for the year 2005 are preliminarily due to jurisdictions requesting time extensions from the CIWMB (now CalRecycle). It should be noted that since 2006, CalRecycle no longer evaluates overall waste diversion rates for individual jurisdications. Pursuant to Senate Bill 1016 (see discussion below under Regulatory Framework), waste disposal and recycling rate reporting is accomplished using a “per capita” disposal rate, and therefore information regarding overall waste diversion for cities and counties is no longer available.

As of 2005, however, the County's unincorporated area diversion rate was 49%, and many of the incorporated jurisdictions' solid waste customers already have a significant portion of their waste diverted

through curbside recycling programs; however, residential and commercial self-haul customers that take their waste to disposal facilities have had limited diversion opportunities. The County is implementing its Comprehensive Disposal Site Diversion Program (CDSDP) at County-owned disposal facilities to divert self-hauled residential and commercial waste.

(2) City of Fontana

(a) Fontana Solid Waste and Recycling Program

The City of Fontana Solid Waste and Recycling Program coordinates the weekly disposal of refuse, recyclables, and green waste materials for its residents. The City's recycling program is intended to conserve natural resources, save energy, and extend the life of the landfills. The City currently contracts with Burrtec Waste Industries to provide City refuse and recycling disposal services. The City offers the following solid waste and recycling services to residents: (1) free curbside removal of large or bulky items (stumps, appliances, etc.) twice per year; (2) reduced rates to senior and handicapped residents; (3) complimentary pull-out or back-yard services for senior and handicapped residents; and (4) free additional recycling and green waste containers.

(b) City of Fontana Waste Diversion and Disposal

The City of Fontana currently contracts with Burrtec Waste Industries to provide City refuse and recycling disposal services. Burrtec provides residential, commercial, and construction/demolition waste disposal services. Burrtec operates three material recovery facilities, which sort and process recyclables, the closest of which is the West Valley Transfer Station/Material Recovery Facility at 13373 Napa Street in the City of Fontana, approximately 2.5 miles south-southwest of the project site.

Burrtec also operates and maintains the Mid-Valley Landfill, which serves the project area, with regulatory oversight provided by the San Bernardino County Department of Public Works Solid Waste Management Division. The facility, located at 2390 North Alder Avenue in the City of Rialto, accepts various types of waste including agricultural waste, construction/demolition debris, animal remains, industrial waste, inert waste, mixed/municipal solid waste, compostable materials (green and untreated wood waste), tires, metals, and treated wood waste. The landfill operates from 7 AM to 5 PM Monday through Friday and from 8 AM to 5 PM on Saturdays, and is permitted to accept a maximum of 7,500 tons per day (tpd) of waste, though the average daily disposal rate is 2,026 tons.[1] The landfill has a total estimated capacity of 101.3 million cubic yards, of which approximately 29.6 million cubic yards have been used to-date, which yields a remaining capacity of approximately 71.7 million cubic yards. The landfill is estimated to remain operational until 2033.

b. Regulatory Framework

(1) State Regulations

The State of California has enacted three key legislations relating to solid waste. These include Assembly Bill 939 – the California Integrated Waste Management Act of 1989 (Public Resources Code Sections 41000-41460), Senate Bill 1327 – the California Solid Waste Reuse and the Recycling Access Act of 1991 (Public

[1] *State Of California, California Integrated Waste Management Board, Regional Water Quality Control Board. "Application for Solid Waste Facility Permit/Waste Discharge Requirements – Mid-Valley Landfill." May 2012.*

Resources Code Sections 42900-42911), and Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements. Each of these regulations is described below.

(a) Assembly Bill 939 – California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) introduced an integrated waste management hierarchy to guide local agencies in the implementation of source reduction, recycling, composting, and environmentally safe transformation and land disposal. It required each county to establish a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element. It also required each county to prepare, adopt, and submit an Integrated Waste Management Plan (IWMP) to the California Integrated Waste Management Board (CIWMB), which was established by AB 939 to ensure the monitoring and enforcement of AB 939 mandates. Through source reduction, recycling, and composting activities, AB 939 required each city or county to divert 50 percent of all solid waste by January 1, 2000.

To note, on Jan. 1, 2010 California's recycling and waste diversion efforts were streamlined into the new Department of Resources Recycling and Recovery — otherwise known as CalRecycle. CalRecycle manages programs created through two landmark initiatives--the Integrated Waste Management Act and the Beverage Container Recycling and Litter Reduction Act--that were formerly part of the CIWMB and the Department of Conservation (DOC). Now housed in the Natural Resources Agency, CalRecycle merges the duties of the Board with those of DOC's Division of Recycling to best protect public health and the environment by effectively and efficiently managing California's waste disposal and recycling efforts.

Although the requirements of AB 939 are directly applicable to Cities and Counties, AB 939 is identified as a relevant regulation due to the fact that individual development projects within the City contribute to the determination of whether the City of Fontana is able to divert 50 percent of all solid waste.

(b) Senate Bill 1016 – Per Capita Disposal Measurement System

The purpose of the "Per Capita Disposal Measurement System" (Chapter 343, Statutes of 2008 proposed as SB 1016 – Wiggins) is to make the process of goal measurement as established by the Integrated Waste Management Act of 1989 (AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator--the per capita disposal rate--which uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

In order for CalRecycle and jurisdictions to more properly focus on successful program implementation, SB 1016 shifts from the historical emphasis on using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program implementation. Overall benefits of the new approach include:

- Focuses on diversion program implementation.
- Increases simplicity and timeliness of goal measurement.
- Allows for jurisdiction growth.

- Saves money and time by eliminating complex calculations.
- Increases CalRecycle staff field presence.
- Adjusts CalRecycle review schedule for compliant jurisdictions.

The per capita disposal rate approach is not determinative of jurisdiction compliance. CalRecycle will use per capita disposal as an indicator in evaluating program implementation and local jurisdiction performance. CalRecycle's evaluation will be focused on how jurisdictions are implementing their programs.

(c) Senate Bill 1327 – California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires individual development projects to provide adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is to be determined by the appropriate jurisdiction's ordinance. If no such ordinance exists within the jurisdiction, the CIWMB-adopted ordinance shall take effect. As discussed below, Chapter 24 of the Fontana Municipal Code (FMC) addresses solid waste, recycling, and litter prevention in the City. Despite the requirements set forth in Chapter 24 of the FMC, the requirements California Solid Waste Reuse and the Recycling Access Act of 1991 are conservatively included in this analysis as all development projects within the State are required to provide adequate storage area for the collection and removal of recyclable materials per the Act.

(d) Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements

Senate Bill 1374 (Kuehl) passed in 2002, requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also requires that the CIWMB complete five items with regard to the diversion of construction and demolition waste: (1) adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition debris from landfills; (2) consult with representatives of the League of California Cities, the California State Association of Counties, private and public waste services and building construction materials industry and construction management personnel during the development of the model ordinance; (3) compile a report on programs, other than the model ordinance, that local governments and general contractors can implement to increase the diversion of construction and demolition debris; (4) post a report on the agency's website for general contractors on methods by which contractors can increase diversion of construction and demolition waste materials; and (5) post on the agency's website a report for local governments with suggestions on programs, in addition to the model ordinance, to increase diversion of construction and demolition waste materials.

(2) Regional Plans

(a) San Bernardino County Countywide Integrated Waste Management Plan

State law requires counties in California, in conjunction with their cities, to prepare a Countywide Integrated Waste Management Plan (CIWMP) to reduce dependence on landfilling solid waste, and to ensure an effective and coordinated effort to safely manage solid waste generated within the State. As noted above, AB 939 was enacted by the State in order to reach these goals. The highest priority of AB 939 is to reduce the amount of waste generated at its source (source reduction). The second set of priorities is: reuse, extending the life of existing products; recycling of materials as feed stock for the manufacture of new products; and composting of organic materials.

Source reduction. reuse, recycling and composting are jointly referred to as waste diversion methods, because they divert materials from landfill disposal. The third priority in the hierarchy is disposal by transformation and then landfilling. Jurisdictions were required by IWMA to reduce the amount of waste disposed by 25 percent by 1995 and by 50 percent by the year 2000, using 1990 as the base year.

The County Integrated Waste Management Plan (CIWMP) is one of the requirements of IWMA and it is the guiding document for attaining the reduction mandate. The CIWMP consists of a Countywide Siting Element, a Countywide Summary Plan, and the following three elements: (1) a Source Reduction and Recycling Element (SRRE), which analyzes the local waste stream to determine where to focus diversion efforts, and presents diversion programs and funding; (2) a Household Hazardous Waste Element (HHWE), which includes programs to encourage safe management of household taxies waste and provides a framework for recycling, treatment, proper disposal and funding. Finally, (3) a Non-Disposal Facility Element (NDFE), which lists existing and planned transfer stations, material recovery facilities, and composting facilities located in and available to each designated jurisdiction within the County.

The County's Countywide Siting Element (CSE) is a document "which provides a description of the areas to be used for development of adequate transformation or disposal capacity" (Public Resources Code [PRC] Section 41700). The CSE demonstrates that the County has sufficient disposal capacity to provide a minimum of 15 years of solid waste disposal for its jurisdictions. The CSE serves as a policy manual, rather than a specific development program. It provides strategies for meeting the County's disposal needs.

The Siting Element was formally approved by the CIWMB in 1997. Since that time, the CSE has had three amendments (1998, 2000 and 2005) to reflect changes in the County's solid waste system. The 2005 Amendment No.3 to the Countywide Siting Element was completed and processed in accordance with State laws and regulations as required by the Public Resources Code (PRC) Sections 41700 through 41721.5 and the California Code of Regulations Title 14 (14 CCR), Sections 18776 through 18788 to reflect the Victorville and Barstow Sanitary Landfill Expansion projects approved by the County Board of Supervisors on May 17, 2005, and the California Integrated Waste Management Board (CIWMB) in October 2005.

The County's Countywide Nondisposal Facility Element (NDFE), which lists facilities that are or will be used to implement diversion programs in the Source Reduction and Recycling Element, was also amended during the last five years. The 2007 NDFE Amendment No.7 was completed and processed in accordance with State law and regulations as required by Public Resources Code (PRC) Sections 41732 and 41733, and the California Code of Regulations Title (14 CCR) Sections 18752 through 18754 to show the location of the Nursery Products, Hawes Composting Facility. The NDFE was approved by the County Board of Supervisors in January 2007 and by the CIWMB on July 17, 2007.

The Countywide Summary Plan contains countywide integrated waste management goals and policies that profile the County's current waste as well as a summary of integrated waste management issues faced by the County and strategies being utilized in its approach to these issues. It summarizes waste management programs designated by the County's jurisdictions to meet their 50 percent waste reduction mandates. It also suggests steps necessary to cooperatively implement and administer specific programs regionally or countywide. The Summary Plan is to be viewed for updating every five years along with any of the elements of the CIWMP. The first Summary Plan was approved by the CIWMB in 1997. The 2007 update is the second and most recent five-year review of the CIWMP.

(3) City of Fontana

(a) City of Fontana General Plan

The Public Facilities, Services & Infrastructure Element of the Fontana General Plan includes a number of goals and policies related to solid waste and recycling, which are intended to optimize safe and efficient waste collection and disposal for City residents, maximize recycling rates, and maintain special programs such as household hazardous waste collection and business cleanups.

(b) City of Fontana Municipal Code

As noted above, Chapter 24, *Solid Waste and Recycling*, of the FMC regulates solid waste collection and recycling within the City of Fontana. Chapter 24 includes provisions regarding provision of private trash collection and hauling services by permitted entities, littering on public property, transport of solid waste, storage and containment of accumulated refuse, nuisance and vector standards, container maintenance standards, residential self-haul standards, and recycling proceeds.

3. PROJECT IMPACTS

a. Significance Thresholds

Appendix G of the *CEQA Guidelines* provides a checklist of questions to assist in determining whether a proposed project would have a significant impact related to various environmental issues including solid waste. Based on the following issue areas identified in Appendix G of the *CEQA Guidelines*, a significant impact to solid waste would occur if the project would result in one or more of the following:

Threshold 1: Be served by a landfill with insufficient permitted capacity to accommodate the project's soild waste disposal needs (refer to Impact Statement 4.O.3-1 below); or

Threshold 2: Fail to comply with federal, state, and local statutes and regulations related to solid waste (refer to Chapter 6, *Other Mandatory CEQA Considerations*, and the Initial Study contained in Appendix A of this Draft EIR. A less than significant impact would occur in this regard.).

b. Methodology

The environmental impacts of the proposed project with respect to solid waste are determined by comparing the project's net increase in solid waste to the capacity of solid waste facilities that would serve the project site. In addition, a discussion of recycling programs and design features that would be implemented by the proposed project is provided to determine whether the project would comply with federal, state, and local statutes and regulations related to solid waste.

c. Project Design Features

The proposed project would include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material. In addition, all demolition and construction debris would be hauled to a sorting yard where a minimum of 60 percent of the tonnage would be diverted from landfills.

d. Analysis of Project Impacts

(1) Landfill Disposal Capacity

Threshold	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Impact 4.0.3-1: Project implementation would not exceed the capacity of the landfill serving the project area. This impact is considered less than significant.

(a) Construction

Construction of future development projects pursuant to the proposed Specific Plan would require demolition of one existing office building (approximately 20,000 square feet of floor area), grading/earthwork, as well as the construction of new buildings on the project site. Each of these activities would generate construction and demolition (C&D) waste including but not limited to soil, wood, asphalt, concrete, paper, glass, plastic, metals, and cardboard that would be disposed of at Mid-Valley Landfill. This facility is permitted to accept up to 7,500 tons per day (tpd) of waste and is projected to have sufficient capacity to accept this daily waste volume through the year 2033. Based on the incremental, long-term buildout of the proposed Specific Plan, and associated volume of C&D waste associated with each development project on-site, the volume of construction-related waste requiring disposal is not expected to be substantial. As such, the project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction activities and impacts in this regard would be less than significant. Mitigation Measures, although not required, are proposed to provide assurance that construction-related solid waste impacts remain less than significant to the extent feasible.

(b) Operation

The majority of the project site is currently undeveloped vacant land, while the remainder of the site is developed with commercial, office, and institutional uses. As illustrated in **Table 4.O.3-1**, *Existing and Proposed Solid Waste Generation for the Proposed Project*, development of the proposed project would result in a net increase of 47,467 pounds per day (or approximately 23.73 tpd) of solid waste or a total of approximately 8,662 tons per year. The project's daily solid waste generation represents approximately 0.32-percent of the maximum permitted daily capacity ([23.73 tons / 7,500 tons] x 100 = 0.316-percent) or 1.17-percent of the average daily tonnage ([22.76 tons / 2,026 tons] x 100 = 1.171-percent) for the Mid-Valley Landfill, which would accept solid waste from the project site.[2,3] It is important to note that this analysis is very conservative in that it does not take into account diversion rates currently achieved by the City of Fontana as a whole. Waste diversion for the proposed project is anticipated to be consistent with other similar development within the City and divert a minimum of 50 percent of trash from landfills based on compliance to standard City practices and regulations described above. Based on this percentage, the

[2] *For purposes of this analysis, it is conservatively assumed that all operational waste would be transported to Class III landfills. This provides a worse-case analysis of impacts to Class III landfills. While a small portion of waste materials generated by the project during operation could be disposed of at an unclassified (inert) landfill, which accepts yard trimmings, earth-like waste and other similar materials, such waste would represent a negligible increase in the daily or annual amount of waste disposal at unclassified landfill facilities such that existing intake quantities at the unclassified landfill would not be substantially altered.*

[3] *State Of California, California Integrated Waste Management Board, Regional Water Quality Control Board. "Application for Solid Waste Facility Permit/Waste Discharge Requirements – Mid-Valley Landfill." May 2012.*

Table 4.O.3-1

Existing and Proposed Solid Waste Generation for the Proposed Project

Land Use	Size	Generation Rate [a]	Total (lbs/day)	Total (tons/day)
Existing				
Retail	446,000 s.f.	5 lbs/k.s.f./day	2,230	1.12
Office	144,000 s.f.	6 lbs/k.s.f./day	864	0.43
		Total	**3,094**	**1.55**
Proposed				
Residential	6,410 units [b]	4 lbs/unit/day	25,640	12.82
Office	2,103,771 s.f.[c]	6 lbs/k.s.f./day	12,623	6.31
Retail	602,235 s.f.	5 lbs/k.s.f./day	3,011	1.51
Light Industrial	1,602,373 s.f. [e]	5 lbs/k.s.f./day	8,012	4.01
School	359 employees[f]	3.55 lbs/emp/day	1,275	0.64
		Total	**50,561**	**25.28**
Difference between Existing and Proposed (Net Increase)			**47,467**	**23.73**

Notes: s.f. = square feet k.s.f. = thousand square feet lbs = pounds emp = employees

[a] *Generation factors provided by the CalRecycle website, refer to Estimated Solid Waste Generation Rates. http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm. Accessed September 2012.*

[b] *When assuming development of R-4 residential uses in Planning Area 24, total residential uses would total 6,410 dwelling units.*

[c] *Office uses include office space component of Mixed-Use development as well as existing Caltrans facility that would remain on-site. If R-4 residential uses are developed in Planning Area 24, office uses would be reduced by 313,632 square feet to a new total of 2,103,771 square feet due to conversion of Planning Area 24 from MU-1 business park to R-4 residential uses.*

[d] *Retail total includes retail component of Mixed-Use development and existing Falcon Ridge Town Center that would remain on-site.*

[e] *If R-4 residential uses are developed in Planning Area 24, industrial uses would be reduced by 34,848 square feet to a new total of 1,602,373 square feet due to conversion of 20.0 acres in Planning Area 24 to R-4 residential uses.*

[f] *Proposed school employment based on factors presented in Section 4.K, Population and Housing, of this Draft EIR.*

Source: PCR Services Corporation, 2014.

proposed project is estimated to generate approximately 23,734 pounds per day (11.87 tpd) or 4,333 tons per year of solid waste. This amount of solid waste is well within the permitted capacity of 7,500 tpd for the the Mid-Valley Landfill, which is projected to accept this maximum daily volume of waste through the year 2033.

Based on the above, project-generated waste would not exceed the capacity of landfills serving the project area. In addition, the project would not generate solid waste at a level that would generate the need for new or substantially expanded recycling or disposal facilities. The available capacity of the existing and/or planned future landfills would not be exceeded, and therefore impacts regarding solid waste generation from project operations would be less than significant. Mitigation measures, although not required, are proposed to provide assurance that operational-related solid waste impacts remain less than significant to the extent feasible.

(2) Consistency with Regulatory Framework

The City of Fontana has reached the 50 percent diversion rate mandated by AB 939. An estimated 2006 diversion rate of 50 percent was reached by the City through refuse management programs within its source

reduction, recycling, composting, special waste materials, transformation, policy incentives, facility recovery, and public education components.[4] The proposed future development projects would include project features to reduce the need for solid waste disposal, including the provision of on-site recycling containers and adequate storage area for such containers. Waste diversion for future projects is anticipated to be consistent with other similar development within the City and divert a minimum of 50 percent of trash from landfills based on compliance to standard City practices and regulations. Additionally, the proposed project would be consistent with the applicable goals and policies of the Fontana General Plan with regard to solid waste and recycling, as discussed below in **Table 4.O.3-2**, *General Plan Consistency Analysis*. As such, impacts relative to consistency with applicable regulations addressing solid waste would be less than significant.

Table 4.O.3-2

General Plan Consistency Analysis

Public Facilities, Services & Infrastructure Element	
Goal #7: Our City has one of the most effective solid waste reduction and recycling records in the County.	
Policy 7-1: Where joint programs offer improved efficiency or reduced cost, the City shall collaborate with other entities in waste recycling efforts.	**Not Applicable.** The City's collaboration with other entities regarding waste recycling efforts would not affect, or be affected by, the proposed Specific Plan.
Policy 7-2: Services shall continue to be provided to resident and business citizens that facilitate community cleanup, curbside collections and diversion of oil and other hazardous waste materials.	**Consistent.** The City's ongoing provision of services to resident and business citizens that facilitate community cleanup, curbside collections and diversion of oil and other hazardous waste materials would not be directly affected by the proposed Specific Plan. However, payment of Development Fees for future development projects on-site, as well as long-term payment of property taxes and sales tax revenues from on-site uses would serve to support the City's ongoing solid waste and recycling services.
Policy 7-3: An aggressive public education program shall be maintained to stimulate recycling, reuse and waste reduction by its resident and business citizens.	**Not Applicable.** The City's public education program would not affect, or be affected by, the proposed Specific Plan.

4. MITIGATION MEASURES

Implementation of the following mitigation measures provided in the City's 2003 General Plan EIR (GP EIR) are applicable to the proposed Specific Plan and would be implemented, as necessary, to ensure that impacts related to wastewater services and facilities are less than significant.

[4] *CalRecycle, "Jurisdiction Diversion/Disposal Rate Detail," accessed online at: http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=160&Year=2010, accessed September 2012.*

a. Construction

Mitigation Measure O-10: Prior to the issuance of any demolition or construction permit, the Applicant shall provide a copy of the receipt or contract indicating that the construction contractor shall only contract for waste disposal services with a company that recycles demolition and construction-related wastes. The contract specifying recycled waste service shall be presented to the Development Services Department prior to approval of certificate of occupancy.

Mitigation Measure O-11: In order to facilitate on-site separation and recycling of construction related wastes, the construction contractor shall provide temporary waste separation bins on-site during demolition and construction activities.

b. Operation

Mitigation Measure O-12: The City shall continue to maintain a contractual arrangement that achieves maximum recycling rates at a reasonable price. [GP EIR MM SW-1]

Mitigation Measure O-13: Where joint programs offer improvement efficiency or reduced cost, the City shall collaborate with other entities in recycling efforts. [GP EIR MM SW-2]

Mitigation Measure O-14: The City shall continue to provide services to resident and business citizens that facilitate community cleanup, curbside collections and diversion of oil and other hazardous waste materials. [GP EIR MM SW-3]

Mitigation Measure O-15: The City should maintain an aggressive public information program to stimulate waste reduction by its resident and business citizens. [GP EIR MM SW-4]

5. CUMULATIVE IMPACTS

Chapter 3, Basis for Cumulative Analysis, of this Draft EIR identifies four related projects that are anticipated to be developed within the vicinity of the project site. It is conservatively assumed that each of these projects would contribute solid waste to the landfill serving the project site. Development of these related projects would generate solid waste during their respective construction periods and on an on-going basis during their operation. Construction of the proposed project in conjunction with related projects would generate C&D waste and cumulatively increase the need for waste disposal at Mid-Valley Landfill. As stated above, the Mid-Valley Landfill will have adequate capacity until 2033. As such, future shortage of disposal capacity at unclassified landfills is not expected. Further, related projects would be subject to environmental review on a case-by-case basis and thus, are anticipated to recycle C&D waste to the maximum extent feasible. Based on the above, cumulative solid waste impacts to unclassified landfills due to project construction are concluded to be less than significant, and the project's contribution to such impacts would not be cumulatively considerable.

The estimated solid waste generation resulting from operation of related projects is shown in **Table 4.O.3-3**, *Cumulative Solid Waste Generation*. As indicated therein, the solid waste generation for the proposed project and related projects is forecasted to be approximately 76,320 pounds per day (38.2 tpd) or approximately

Table 4.O.3-3

Cumulative Solid Waste Generation

Related Project	Residential (units)	Office (acres)	Retail (acres)	Industrial (acres)	School (acres)	
Arboretum Specific Plan	3,526	-	8.8	-	46.0	
Ventana Specific Plan	842	8.3	4.9	-	-	
Summit at Rosena Specific Plan	856	-	1.0	-	12.0	
Citrus Heights North Specific Plan	530[a]	-	-	-	-	
Subtotal Related Projects	*5,754*	*8.3*	*14.7*	*0.0*	*58.0*	
Proposed Project [b]	***6,410***	***120.7***	***55.3***	***92.0***	***84.0***	
TOTAL [c]	**12,164**	**129.0**	**70.0**	**92.0**	**142.0**	**Total**
Cumulative Solid Waste Generation Estimate [d,e]						
Total (lbs/day)	48,656	13,486	3,812	8,015	2,351	**76,320**
Total (tpd)	24.33	6.74	1.91	4.01	1.18	**38.17**

Notes: tpd = tons per day

[a] *The Citrus Heights North Specific Plan was approved for a total of 1,154 residential units (606 single-family and 548 multi-family); however, as of Spring 2012, approximately 350 single-family units have been constructed and approximately half of the multi-family units are completed, resulting in 530 units yet to be constructed.*

[b] *When assuming development of R-4 residential uses in Planning Area 24, proposed residential units would total 6,410 units, office uses would total 120.7 acres, and industrial uses would total 92.0 acres; all other totals would remain as proposed in the Specific Plan.*

[c] *Assuming development of R-4 residential uses in Planning Area 24, total cumulative residential units would be 12,164 units, total office acreage would be 129.0 acres, and total industrial acreage would be 92.0 acres. All other totals would remain as proposed in the Specific Plan.*

[d] *Solid Waste Generation Based on generation factors provided by the CalRecycle website, refer to Estimated Solid Waste Generation Rates. http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm. Accessed September 2012, and assumes 4 lbs/unit/day for residential uses, 6 lbs/k.s.f./day for office uses, 5 lbs/k.s.f./day for retail uses, 5 lbs/k.s.f./day for light industrial uses, and 3.55 lbs/emp/day for school uses. Similar to the Westgate Specific Plan, an FAR or 0.4 for office uses, 0.25 for retail uses, and 0.4 for industrial uses is assumed.*

[e] *School employment is based on 6.59 employees per acre of elementary school use and 3.35 employees per acre of high school use per data presented in Table B-1 of the "Employment Density Study Summary Report", prepared for SCAG by The Natelson Company (October 2001). Total cumulative school employment is estimated to be 662 employees based on these factors.*

Source: CalRecycle, 2012, and PCR Services Corporation, 2014

13,932 tons per year. However, this estimate of solid waste generation from the proposed project and related projects does not take into account solid waste reduction measures that would be implemented and does not discount solid waste generation from existing uses that would be removed as part of related projects.

The 76,320 pounds per day (or 38.2 tpd) of cumulative solid waste generated per day would represent approximately 0.51-percent of the estimated daily capacity ([38.2 tons / 7,500 tons] x 100 = 0.509-percent) or 1.89-percent of the average daily tonnage ([38.2 tons / 2,026 tons] x 100 = 1.886-percent) of the Mid-Valley Landfill, which would have adequate capacity to accommodate solid waste from the project site and related project sites. Furthermore, similar to the proposed project, the related projects would be subject to the source reduction and recycling requirements established by the local jurisdiction in accordance with AB 939 (i.e., divert 50 percent of the solid waste generated from landfills through waste reduction, recycling,

and composting). As with the proposed project, future projects would also be required to participate in recycling programs, thus reducing the amount of solid waste to be disposed of at the landfills described above. Based on these considerations, cumulative impacts regarding solid waste would be less than significant, and the project's contribution to such impacts would not be cumulatively considerable. Nonetheless, implementation of applicable mitigation measures would provide additional assurance that the project's incremental contribution to cumulative solid waste impacts on a regional level remains less than significant.

6. LEVEL OF SIGNIFICANCE OF AFTER MITIGATION

The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction activities. Thus, solid waste impacts during construction would be less than significant. Mitigation Measures O-10 and O-11 are proposed to provide assurance that construction-related solid waste impacts remain less than significant to the extent feasible.

The project would not generate solid waste at a level that would generate the need for new or substantially expanded recycling or disposal facilities, and the available capacity of the existing and/or planned landfills would not be exceeded; therefore, impacts associated with solid waste generation from project operations would be less than significant. Mitigation Measures O-12 through O-15 are proposed to provide assurance that operational-related solid waste impacts remain less than significant to the extent feasible.

As the proposed project would comply with all State, regional, and local plans, policies, and regulations relating to solid waste, impacts regarding consistency with the regulatory environment would be less than significant.

5.0 Alternatives

5.0 ALTERNATIVES

1. SUMMARY OF THE ALTERNATIVES

Under CEQA, the identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process. Public Resources Code Section 21002.1(a) establishes the need to address alternatives in an EIR by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, the purpose of an environmental impact report is to identify alternatives to the project.

Direction regarding the definition of project alternatives is provided in *CEQA Guidelines* Section 15126.6(a) as follows:

> *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."*

The *CEQA Guidelines* emphasize that the selection of project alternatives be based primarily on the ability to reduce significant impacts relative to the proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."[1] The *CEQA Guidelines* further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are analyzed.[2]

In selecting project alternatives for analysis, potential alternatives should be feasible. *CEQA Guidelines* Section 15126.6(f)(1) states that:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."*

The *CEQA Guidelines* require the analysis of a "no project" alternative and an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the No Project/No Build Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.[3]

The first alternative selected for analysis is a No Project/No Build Alternative, pursuant to Section 15126.6(e) of the *CEQA Guidelines*. Two additional alternatives were selected to directly address the

---

1 *CEQA Guidelines Section 15126.6(b).*

2 *Ibid, Section 15126.6(f).*

3 *Ibid, Section 15126.6(e)(2).*

project's significant and avoidable impacts, which are permanent loss of agricultural resources, short- and long-term air quality and noise impacts that would occur due to future project construction and operation, impacts to on-site historical resources, and operational impacts to intersection levels of service. The two alternatives selected would both reduce the extent and duration of construction activity, and operational traffic volumes (and associated noise and air pollutant emissions) by developing a project that would be reduced in size and intensity, and one of them would also avoid development in areas where known historical resources exist (including the vineyards, water tank, water system, and farmstead site CA-SBR-7324H).

Based on these potentially significant environmental impacts and the objectives established for the project (refer to Chapter 2, *Project Description*, of this Draft EIR), the following alternatives to the proposed project are evaluated in this Chapter:

1. No Project/No Build Alternative
2. No Project/Existing Specific Plan Alternative
3. Historic Preservation Alternative

2. PROJECT OBJECTIVES

As discussed in Chapter 2, *Project Description*, of this Draft EIR, the following describes the objectives of the proposed project, which are provided in the proposed Specific Plan as "Specific Plan Goals," and are intended to implement the Plan's Community Planning Vision. The Specific Plan Goals are as follows:

Goal 1: In order to create a vibrant community, incorporate a rich diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses.

Goal 2: Create organizing elements that provide a community identity and opportunity for social interaction.

Goal 3: Develop a plan that generates employment opportunities and improves the city's tax base.

Goal 4: Develop a plan that establishes a corporate corridor.

Goal 5: Create pedestrian friendly connectivity to main activity nodes, including employment, shopping, schools and recreation.

Goal 6: Create a diversity of housing types within a high amenity setting.

Goal 7: Create a village structure.

Goal 8: Provide quality master planning, architectural and landscape architectural standards.

Goal 9: Develop a compact community to promote a healthy village character, enhance sustainability and conserve resources.

Goal 10: Create a community with a high quality of life.

3. ALTERNATIVES CONSIDERED AND REJECTED

In addition, to the guidance cited above regarding purpose and contents of an analysis of alternatives to a proposed project, *CEQA Guidelines* Section 15126.6(c) states that an EIR identify alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the *CEQA Guidelines*, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. Alternatives that have been considered and rejected as infeasible include the following.

a. Alternate Site Location Alternative

State *CEQA Guidelines* Section 15126.6(f)(2) require consideration regarding development at one or more alternative location(s). An alternative site outside of the City of Fontana would require the acquisition of a comparable area of land, or approximately 964 acres, which given the amount of land necessary that is readily accessible would be prohibitive for the project applicant and other landowners/affected parties (including the local school districts that have purchased land on-site for future schools). The project area is currently served by existing utilities, including water, wastewater, electricity, natural gas, and telecommunications infrastructure, which would also serve future uses on-site. An alternative site location in Southern California with the amount of land required to allow for the proposed project to be developed on the property, which is also served by adequate infrastructure, may not be possible in the foreseeable future. Additionally, the location of the project site surrounded by existing development adjacent to two major freeways provides an opportunity to concentrate growth within an already urbanized area where a market for housing, goods, and services is already established.

b. Reduced Density Alternative

As discussed in Section 4.C, *Air Quality*, of this Draft EIR, project-related and cumulative impacts associated with air pollutant emissions from construction and operation of the proposed Westgate Specific Plan would exceed established SCAQMD thresholds and would also result in conflicts with the applicable AQMP. As these significant and unavoidable adverse impacts are directly related to the overall intensity of construction activities and operational vehicle emissions of the proposed project, an alternative was considered that would reduce the overall intensity of future development on-site such that construction-related and operational vehicle emissions would not exceed SCAQMD thresholds. However, based upon preliminary calculations, the necessary reduction in intensity necessary to adequately reduce emissions for all criteria pollutants below significance thresholds would be on the order of a ten-fold decrease (unmitigated NO_X emissions for project operations at buildout, for example, are 1200 percent of the daily emissions threshold). While such a substantial reduction in project intensity is not feasible, both the No Project/Existing Specific Plan Alternative and the Historic Preservation Alternative would entail a sizeable reduction in development intensity within the project boundaries, and would therefore reduce the proposed Specific Plan's impacts to air quality, though such impacts would remain significant even with mitigation. As such, since the No Project/Existing Specific Plan Alternative and the Historic Preservation Alternative would also represent reduced intensity development scenarios, no separate reduced density alternative is proposed.

4. ANALYSIS FORMAT

In accordance with *CEQA Guidelines* Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the project. Furthermore, each alternative is evaluated to determine whether the project objectives, identified in Chapter 2, *Project Description*, of this Draft EIR would be substantially attained by the alternative.[4] The evaluation of each of the alternatives follows the process described below:

a. The net environmental impacts of the alternative after implementation of reasonable mitigation measures are determined for each environmental issue area analyzed in the EIR.

b. Post-mitigation significant and non-significant environmental impacts of the alternative and the project are compared for each environmental issue area. Where the net impact of the alternative would be clearly less adverse than the impact of the project, the comparative impact is said to be "less." Where the alternative's net impact would clearly be more adverse than the project, the comparative impact is said to be "greater." Where the impacts of the alternative and project would be roughly equivalent, the comparative impact is said to be "similar."

c. The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose and basic project objectives are substantially attained by the alternative.

Table 5-1, *Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project,* below, provides a summary matrix that compares the impacts associated with the project with the impacts of each of the proposed alternatives.

[4] *Ibid, Section 15126.6(c).*

Table 5-1

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
A. Aesthetics/Visual Resources				
Views/Scenic Vistas	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Aesthetics/Visual Character	Less Than Significant	Greater (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Light and Glare	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
B. Agriculture and Forestry Resources				
Farmland Conversion	Significant and Unavoidable	Less (No Impact)	Similar (Significant and Unavoidable)	Less (Significant and Unavoidable)
C. Air Quality				
Air Quality Plan Consistency	Significant and Unavoidable	Less (No Impact)	Similar (Significant and Unavoidable)	Similar (Significant and Unavoidable)
Construction-Related Emissions				
Regional Emissions	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Localized Emissions	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Operational Emissions				
Regional Emissions	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Localized Emissions	Less Than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)
Toxic Air Contaminants	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
Odors	Less than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)
D. Biological Resources				
Sensitive Species	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)
Riparian Habitat	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Wetlands	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Wildlife Movement	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Regulatory Consistency	Less than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Habitat Conservation Plans/ Natural Community Conservation Plans	Less than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
E. Cultural Resources				
Historic Resources	Significant and Unavoidable	Less (No Impact)	Similar (Significant and Unavoidable)	Less (No Impact)
Archaeological Resources	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Paleontological Resources	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
Human Remains	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
F. Geology and Soils				
Groundshaking/ Seismicity	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Soil Erosion	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Compressible/ Collapsible Soils	Less Than Significant w/ Mitigation	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
G. Greenhouse Gas Emissions				
Greenhouse Gas Emissions	Less Than Significant w/ Mitigation	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Consistency with GHG Reduction Plans	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)
H. Hazards and Hazardous Materials				
Hazardous Materials Releases	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Hazardous Emissions Near Schools	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
Listed Hazardous Materials Sites	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)
Emergency Response and Evacuation Plans	Less Than Significant w/ Mitigation	Less (No Impact)	Similar (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
I. Hydrology and Water Quality				
Site Drainage and Flooding	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Storm Drain Capacity	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Floodplains and Flood Zones	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Levee or Dam Failure	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Groundwater Hydrology	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Waste Discharge Requirements	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Erosion and Siltation	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Water Quality Degradation	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
J. Land Use				
Consistency with Plans, Policies, and Regulations	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Similar (Less Than Significant)
K. Noise				
Violation of Noise Standards	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Groundborne Noise and Vibration	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Permanent Noise Increases	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Temporary Noise Increases	Significant and Unavoidable	Less (No Impact)	Less (Significant and Unavoidable)	Less (Significant and Unavoidable)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
L. Population and Housing				
Population	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Housing	Less Than Significant	Less (No Impact)	Greater (Less Than Significant)	Greater (Less Than Significant)
Employment	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Greater (Less Than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
M. Public Services				
Fire Protection	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Police Protection	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Schools	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Libraries	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Parks and Recreation	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (Less Than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
N. Transportation/Traffic				
Traffic System Level of Service	Significant and Unavoidable	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Congestion Management Program Facilities	Less Than Significant w/ Mitigation	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Site Access and Traffic Safety	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Parking	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Alternative Transportation	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)

Table 5-1 (Continued)

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan	Alternative 3: Historic Preservation
O. Utilities				
Water Infrastructure	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)
Water Supply	Less Than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)
Wastewater Conveyance and Treatment Capacity	Less Than Significant w/ Mitigation	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Landfill Disposal Capacity	Less Than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)
Regulatory Consistency	Less Than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)

Source: PCR Services Corporation, 2014.

5. ALTERNATIVES
A. ALTERNATIVE 1: NO PROJECT/NO BUILD ALTERNATIVE

1. DESCRIPTION OF THE ALTERNATIVE

In accordance with the *CEQA Guidelines*, the No Project/No Build Alternative for a development project on an identifiable property consists of the circumstance under which the project does not proceed. Section 15126.6(e)(3)(B) of the *CEQA Guidelines* states that, "in certain instances, the No Project/No Build Alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, for purposes of this analysis, the No Project/No Build Alternative (Alternative 1) assumes that no new development would occur within the project site. Thus, the future development of up to 5,931 dwelling units, commercial/retail uses, business parks, schools, and open space and parks on the project site would not occur. Under Alternative 1, with the exception of the existing multi-tenant office building, Falcon Ridge Town Center retail uses, and Caltrans Southern Regional Lab facility, the project site would remain undeveloped and vacant. Environmental effects under this Alternative would be similar to existing site conditions, as described in the existing setting sections of each analysis in Chapter 4 of this Draft EIR. However, impacts of this Alternative relative to each issue area are discussed below.

2. ENVIRONMENTAL IMPACTS

a. Aesthetics/Visual Resources

(1) Views/Scenic Vistas

Views of and across the project site, including views from City-designated scenic corridors, would not be altered under the No Project/No Build Alternative. Views of the San Gabriel and San Bernardino Mountains, and the Jurupa Hills would not be further obstructed from locations throughout the project area given the lack of additional urban development under this Alternative. Since existing views of scenic resources would not be further obstructed or otherwise affected under Alternative 1, impacts to scenic vistas would be less than significant and less than the proposed project.

(2) Aesthetics/Visual Character

Under the No Project/No Build Alternative, no changes in the visual character of the project site would occur. The site would remain in its current, mostly undeveloped condition, with the site appearance defined by the existing disturbed vacant land and former vineyards. Site improvements including site landscaping, architectural design elements, streetscapes, and unified signage and lighting features would not be provided. Given the lack of notable visual resources within the project boundaries, and associated low visual quality of the site, this Alternative would not improve the aesthetic quality of the project area. As such, although no physical changes would result from this Alternative, the beneficial aesthetic effects of the proposed project would not occur, and therefore impacts would be greater than under the proposed project in this regard.

(3) Light and Glare

Under the No Project/No Build Alternative, no new lighting would be added to the project site, in contrast to the proposed project which would add night-time lighting to the project site that is similar to lighting and glare conditions currently occurring in developed portions of the project site and surrounding area. Since no

new light or glare would occur under the No Project/No Build Alternative, this Alternative would result in less light and glare impacts, as no impact would occur.

b. Agriculture and Forestry Resources

The No Project/No Build Alternative would not result in any development on land designated as Farmland by the California Department of Conservation, nor would it result in any physical changes that could result in the conversion of farmland to non-agricultural use. As such, no impacts to agricultural resources would result from this Alternative, and a significant unavoidable impact related to farmland conversion under the proposed project would be avoided. Impacts would be less than under the proposed project.

c. Air Quality

The No Project/No Build Alternative would include no new development, and therefore would not generate additional air pollutant emissions beyond those currently occurring within the air quality basin. In contrast, the proposed project's construction activity and long-term operation would generate air quality emissions that would result in significant and avoidable impacts. Since this Alternative does not involve any additional emissions sources, no impact would occur and impacts would be less than the proposed project.

d. Biological Resources

The No Project/No Build Alternative would not physically alter the project site or affect biological resources or jurisdictional features located within the project area. Based on the lack of direct or indirect physical effects on sensitive species, habitats, riparian areas, and wetlands, no impacts would occur under this Alternative. Similarly, because the No Project/No Build Alternative would not result in any material changes to the site or the resources it contains, no impacts to plans, policies, or regulations protecting biological resources, including Habitat Conservation Plans and Natural Community Conservation Plans, would occur. Impacts would be less than the proposed project.

e. Cultural Resources

No changes to the project site would occur under this Alternative, and therefore potential historic resources such as the former vineyards on-site, would not be physically altered or adversely affected. Additionally, the No Project/No Build Alternative would not result in grading or other physical modification of on-site soils as would occur under the proposed project. Under the proposed project, excavation would occur mostly in previously disturbed top soil and cultural resources are not expected to be encountered. Notwithstanding, mitigation measures to provide for collection and treatment of resources have been proposed in the unlikely-event such resources should be recovered. Since no impacts to cultural resources would occur under Alternative 1, impacts are considered to be less than those of the proposed project.

f. Geology and Soils

The No Project/No Build Alternative would not involve the development of new buildings or the placement of additional people within the project boundaries that could be adversely affected by geologic hazards. Since the No Project/No Build Alternative would not result in any new development on-site, no impact would occur and impacts would be less than the proposed project.

g. Greenhouse Gas Emissions

The No Project/No Build Alternative would not contribute new uses to the project site and therefore would not result in the direct generation of greenhouse gas emissions. At the same time, this Alternative would not support establishment of land use patterns that are encouraged to reduce the level of greenhouse gas emissions. The proposed project's construction and operational activity would generate greenhouse gases and at the same time would contribute to meeting the AB32 policies regarding reductions in greenhouse gas emissions. Nonetheless, impacts of the No Project/No Build Alternative would be less than those of the proposed project, as no impact would occur in this regard.

h. Hazards and Hazardous Materials

The No Project/No Build Alternative would not alter the existing project site, nor would it introduce new uses or activities. Under this Alternative, the existing conditions of the project site, which is currently characterized mainly by vacant, former vineyards, would remain. No hazardous materials currently exist on site and under Alternative 1 no new hazardous substances would be introduced to the project site. As such, this alternative would have no impacts with regard to hazards and hazardous materials. Impacts related to hazardous substances would be less than those of the proposed project.

i. Hydrology and Water Quality

Under this Alternative, existing uses and vacant portions of the project site would remain in their current state and no new construction would occur. Therefore, no modifications to the existing drainage patterns or type of runoff generated from the project-site would occur. Thus, impacts would be reduced when compared with the proposed project as no impacts would occur under this Alternative.

j. Land Use

Under the No Project/No Build Alternative, there would be no changes to the land uses on-site. As such, there would be no changes in land use patterns and there would be no need for the associated amendments to the City's General Plan or Development Code (Chapter 30 of the Fontana Municipal Code). Further, it would be consistent with other applicable City and regional policies and regulations, and would not conflict with the applicable goals and policies of the General Plan, as is the case with the proposed project. Since this Alternative would not change the current land use or zoning designations of the project site, or result in any conflicts with plans, policies, or regulations applicable to the project area, impacts would be considered less than those of the proposed project. No impacts would occur.

k. Noise

No development would occur within the project site under this alternative. Consequently, it would not generate any new or increased sources of noise or vibration on the project site or within the surrounding vicinity due to project construction or project operations. The No Project/No Build Alternative would not result in an increase in traffic to the project vicinity and would not introduce new noise sources and current noise levels on the property would remain the same as under current conditions. As such, the significant unavoidable noise impacts associated with the proposed project during operations would not occur. Impacts due to project noise of the No Project/No Build Alternative would be less than those of the proposed project, as no impacts would occur.

l. Population and Housing

The No Project/No Build Alternative would not result in any new development on-site, and therefore no additional population growth, housing growth, or employment growth would occur under this scenario. Although the population, housing, and employment growth under the proposed project would be within the range of growth projections for the project area, and therefore impacts would be less than significant, impacts under this Alternative would be less than the proposed project as no impact would occur.

m. Public Services

(1) Fire Protection

Under the No Project/No Build Alternative, no increased demand for fire protection services or fire flow facilities (i.e., upgrades to existing lines and/or additional fire hydrants) would occur. The No Project/No Build Alternative also would not impact the delivery of fire protection services that might otherwise occur from impacts on area traffic flow from construction activities or project-related traffic. While the proposed project would add new population at the project site with potential need for fire and/or emergency services, the impacts on the delivery of fire protection services would be reduced to less than significant levels through payment of developer fees to the City of Fontana. The No Project/No Build Alternative would not result in any impacts to fire protection services. Therefore, the impacts of the No Project/No Build Alternative would be less than under the proposed project.

(2) Police Protection

The No Project/No Build Alternative would not change the existing conditions or increase the residential or daytime population currently on-site. As the majority of the project site is currently vacant, the current demand for police services is relatively low, with the majority of demand for police services being associated with the Falcon Ridge Town Center; however, the Fontana Police Department currently staffs a contact station within this development to address this demand. This Alternative would not alter the demand for police protection services. No construction or operational activities would occur that would impact emergency vehicle response times to the project site or surrounding area. Implementation of the proposed project would introduce new population growth within the project site and result in the need for additional police services, staffing, and/or facilities. However, it would reduce impacts to police services through payment of developer fees to the City, resulting in less than significant impacts. Impacts of the No Project/No Build alternative on police services would be less than those of the proposed project, as no impact would occur.

(3) Schools

As the No Project/No Build Alternative would not directly or indirectly generate any school-age children, there would be no change in the demand for schools relative to existing conditions. Impacts associated with the proposed project would be mitigated to less than significant levels via the payment of school fees at the time of building permit issuance. Since the No Project/No Build Alternative would not generate any school-age children or cause an increase in demand for schools compared to existing conditions, no impact would occur in this regard, and impacts to schools would be less than the proposed project.

(4) Libraries

The No Project/No Build Alternative would not result in new site population that would increase the demand for library services. Impacts to library facilities associated with the proposed project would be less than significant. However, since the No Project/No Build Alternative would not generate an increase in demand for library services as compared to existing conditions, no impact would occur and impacts to libraries would be less than under the proposed project.

(5) Parks and Recreation

The No Project/No Build Alternative would not result in new site population that would increase the demand for parks and recreation services. In contrast, the proposed project would generate approximately 26,844 new residents, including direct growth associated with new housing units and indirect growth associated with new employment opportunities, which would generate a demand for parks and recreational facilities. Project impacts on park and recreational facilities would be reduced to a level that is less than significant through provision of extensive on-site recreation facilities and, if required, payment of applicable City developer fees. However, since the No Project/No Build Alternative would not directly or indirectly generate new residents, no impacts to park facilities would occur and impacts would be less than those under the proposed project.

n. Traffic and Circulation

The No Project/No Build Alternative would not result in additional development within the project area and therefore would not result in any impact to the transportation system due to construction or operation activities. In contrast, the proposed project would add trips to regional and local roadways associated with the site's residential population and employment workforce. The proposed project includes various mitigation measures to ensure that construction activities accommodate smooth and efficient transportation flow during construction, thus avoiding significant traffic hazard impacts due to construction activities. The project's daily trips would add trips to the local roadway network and regional transportation system, but impacts would be reduced to less than significant with mitigation, unless R-4 high density residential uses are developed within Planning Area 24, which is conservatively concluded to result in significant unavoidable operational impacts to intersection levels of service even with implementation of applicable mitigation measures. As such, this Alternative would avoid a significant unavoidable traffic impact associated with implementation of the proposed project. The proposed project's access and parking facilities have been designed to meet project needs and would have less than significant impacts. Impacts of the No Project/No Build Alternative would be less than those of the proposed project, as no impacts would occur under this Alternative.

o. Utilities and Service Systems

(1) Water Supply

The No Project/No Build Alternative would not add new development or population within the project site, and therefore water demand for this Alternative would be identical to existing conditions. Water infrastructure and water supply are sufficient to meet the proposed project's demands at buildout without the need for project mitigation, and thus the project's impacts on the provision of water services would be less than significant. However, impacts of the No Project/No Build Alternative would be less than under the proposed project as no impact would occur under this Alternative.

(2) Wastewater

The No Project/No Build Alternative would not result in the construction of new development within the project area; therefore, wastewater generation for this Alternative would be consistent with the existing conditions at the project site. This Alternative would not increase wastewater generation relative to existing conditions and no additional wastewater would be added to the conveyance and treatment system serving the project site and surrounding area. Although the proposed project's wastewater generation would be within the capacity limits of the sewerage and treatment facilities serving the project site and therefore impacts would be less than significant, impacts under this Alternative would be less than those of the proposed project as no impact to wastewater facilities would occur.

(3) Solid Waste

This Alternative would not result in new development within the project site, and therefore would not increase solid waste generation relative to existing conditions, and would not otherwise adversely affect solid waste disposal or recycling activities or programs. Therefore, the No Project/No Build Alternative would not have any adverse impacts on landfill capacity or conflict with any plans, policies, or regulations related to solid waste. The proposed project would result in less than significant impacts relative to solid waste. As such, since no impact would occur under this Alternative, impacts would be less than under the proposed project.

3. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

The No Project/No Build Alternative would not improve the project site from its current, mostly undeveloped condition, and as such would not meet any of the project objectives, as summarized below in **Table 5-2**, *Comparison of Alternatives' Ability to Meet Project Objectives*. Specifically, this Alternative would not create a vibrant community by incorporating a rich diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses (Goal 1); create organizing elements that provide a community identity and opportunity for social interaction (Goal 2); develop a plan that generates employment opportunities and improves the city's tax base (Goal 3); develop a plan that establishes a corporate corridor (Goal 4); create pedestrian friendly connectivity to main activity nodes, including employment, shopping, schools and recreation (Goal 5); create a diversity of housing types within a high amenity setting (Goal 6); create a village structure (Goal 7); provide quality master planning, architectural and landscape architectural standards (Goal 8); develop a compact community to promote a healthy village character, enhance sustainability and conserve resources (Goal 9); or create a community with a high quality of life (Goal 10).

5. ALTERNATIVES
B. ALTERNATIVE 2: NO PROJECT/EXISTING SPECIFIC PLAN ALTERNATIVE

1. DESCRIPTION OF THE ALTERNATIVE

The No Project/Existing Specific Plan Alternative would reduce the overall intensity of the proposed project by implementing the existing adopted Westgate Specific Plan, which covers nearly the same as the proposed project site, but includes much lower residential development intensity, reduced open space, reduced school uses, an a different mix of commercial designations that includes mixed-use and "flex" zones (a flex zone is a transition zone to provide a buffer between less compatible land uses). Specifically, this Alternative would allow for the development of 1,864 single-family dwelling units on 386.5 acres, 474 multi-family dwelling units on 79.0 acres, 40.9 acres of retail/commercial uses, 117.6 acres of business parks, 129.5 acres of mixed-use development, 6.9 acres of "flex" uses, 15.0 acres of public parks, 91.0 acres designated as open space within the existing utility corridor traversing the project site, and 10 acres for an elementary school campus. Business park, mixed-use, and retail uses would generally be located on the western side of the Specific Plan area, which residential and school uses would be concentrated within the eastern portion of the site. The roadway network on-site would consist of extensions of existing roadways across the project site. Refer to Figure 2-6, *Existing vs. Proposed Specific Plan Comparison*, in Chapter 2, *Project Description*, of this Draft EIR for an illustration of the adopted Specific Plan elements.

2. ENVIRONMENTAL IMPACTS

a. Aesthetics/Visual Resources

(1) Views/Scenic Vistas

Under the No Project/Existing Specific Plan Alternative, the project site would be developed with urban uses allowable under the adopted Westgate Specific Plan, which would result in a similar overall development footprint as the proposed project, but with generally reduced building height and massing, and associated potential for view obstruction. This is primarily due to the substantial reduction in higher residential densities under this Alternative, which would generally limit residential structural heights to two stories. As such, despite a similar overall development footprint, the lower overall building heights under this Alternative would result in incrementally less view obstruction of scenic vistas within and adjacent to the project area than under proposed project conditions. Accordingly, impacts to scenic vistas would be less than significant, but less than under the proposed project.

(2) Aesthetics/Visual Character

This Alternative would improve the project site with a mix of urban uses that would be developed according to established development standards and design guidelines, as would be the case for the proposed project. Although the design theme and overall development pattern would be different than the proposed project, this Alternative would provide a consistent design theme and unified architecture, landscaping, lighting, and signage features that would result in a beneficial impact related to aesthetics and visual character. Therefore, impacts would be less than significant and similar to those of the proposed project.

(3) Light and Glare

Under the No Project/Existing Specific Plan Alternative, new sources of light and glare would be introduced to the undeveloped portions of the project site, as would be the case for the proposed project. While light and glare effects would be increased under this Alternative relative to existing conditions, such light and glare impacts are not expected to be significant given adherence to adopted Specific Plan lighting standards and landscaping and screening requirements. As such, similar to the proposed project, impacts related to light and glare effects would be less than significant.

b. Agriculture and Forestry Resources

The No Project/Existing Specific Plan Alternative would result in urban development throughout the project site, some of which would occur on land designated as Unique Farmland by the California Department of Conservation, and as such it would also result in the physical conversion of farmland to non-agricultural use. As such, significant unavoidable impacts to agricultural resources would result from implementation of this Alternative, even with implementation of applicable mitigation measures, and impacts would be similar to the proposed project.

c. Air Quality

The No Project/Existing Specific Plan Alternative would allow for a similar mix of development on the project site, but at a lower overall intensity than the proposed project particularly due to the reduction in residential density. While construction activities would be of a similar nature and intensity as the proposed project for any given future development under this Alternative, and therefore worst-case daily emissions would exceed thresholds as under the proposed project, the overall duration and frequency of construction activities would be incrementally reduced based on the overall reduction in development intensity on-site. Therefore, although construction emission impacts under this Alternative would be significant and unavoidable due to exceedance of established daily localized and regional emissions thresholds, impacts would be less than the proposed project due to lower overall level of construction activity. Similarly, operational emissions, while reduced due to lower overall project development intensity, would exceed established thresholds and result in significant unavoidable localized and regional air quality impacts. Given the proximity of sensitive land uses to major freeway corridors, as is the case for the proposed project, impacts related to toxic air contaminants would also be significant and unavoidable, though impacts would be incrementally reduced given the reduction in residential density and associated numbers of people exposed to such contaminants. Impacts related to odors would be reduced relative to the proposed project due to lower development intensity on-site, and would remain less than significant.

d. Biological Resources

Under this Alternative, the project site would be developed with urban uses, as is the case under the proposed project. Although development intensity under the No Project/Existing Specific Plan Alternative would be reduced relative to the proposed project, conversion of the undeveloped portions of the project area to urban uses would affect existing resources in a similar manner to the proposed project. Since the entire project site would be ultimately developed, as under the proposed project, impacts related to sensitive species, riparian habitat, wetlands/jurisdictional features, and wildlife movement would be comparable to those of the proposed project and would be reduced to less than significant with implementation of applicable mitigation measures. Likewise, impacts associated with consistency with regulatory framework

and conflicts with Habitat Conservation or Natural Community Conservation Plans would be less than significant and similar to the proposed project.

e. Cultural Resources

The No Project/Existing Specific Plan Alternative would allow for the future construction of urban uses within the project site with a similar development footprint and grading and construction activities as the proposed project. Therefore, this Alternative, like the proposed project, would have the potential to physically affect known historic resources (i.e., on-site vineyards, water tank, water system, and farmstead site CA-SBR-7324H) and undiscovered archaeological and paleontological resources, including human remains. Site clearing and grading activities on-site would have the highest potential to adversely affect such resources, as is the case under the proposed project, though implementation of applicable mitigation measures would reduce this potential. However, even with implementation of applicable mitigation measures, impacts to historic resources would be significant and unavoidable, as is the case with the proposed project. Therefore, similar to under the the proposed project, impacts to historic resources would be significant and unavoidable under this Alternative and impacts to undiscovered archaeological and paleontological resources, including human remains, would be less than significant with mitigation.

f. Geology and Soils

The No Project/Existing Specific Plan Alternative would allow for future development of the site with new residential, commercial, business park, and school uses at a much higher intensity than exists on the site currently, as is the case with the proposed project. However, given the decrease in development on-site relative to the proposed project, this Alternative would expose fewer people to risks associated with seismic ground shaking. Similarly, given the high collapsible soil potential at the project site, this Alternative would expose people to secondary seismic risks due to seismic ground failure, but to a lesser extent than the proposed project. Mitigation would still be required under this Alternative with regard to foundation design and/or soil treatments to address ground shaking and associated ground settlement hazards, but impacts in this regard would be less than the proposed project. Since this Alternative would require similar excavation and grading activities to the proposed project, it would result in comparable impacts regarding soil erosion or the loss of topsoil. However, as is the case with the proposed project, given compliance with applicable water quality regulations, these impacts would be reduced to a less than significant level. As such, despite the comparable amount of grading and excavation under this Alternative, impacts in this regard would be less than the proposed project and less than significant, as lower development intensity on-site would expose fewer people and structures to risks associated with geologic hazards.

g. Greenhouse Gas Emissions

The No Project/Existing Specific Plan Alternative would allow for the future development of the project site with a mix of urban uses similar to the proposed project, but at a lower overall intensity. As such, although greenhouse gas emissions resulting from construction and operation of future uses would be incrementally lower relative to the proposed project, impacts would still require mitigation to be reduced to less than significant. Likewise, impacts related to consistency with GHG reduction plans would be less than significant with mitigation under this Alternative, as is the case for the proposed project. Given the reduction in development intensity and associated greenhouse gas emissions, impacts would be less than the proposed project.

h. Hazards and Hazardous Materials

This Alternative, like the proposed project, would require that existing potential hazardous materials conditions on-site be adequately addressed prior to development of future uses. Mitigation measures prescribed for the proposed project would also be necessary under this Alternative in order to reduce impacts related to hazardous materials releases, hazardous emissions near schools, and listed hazardous materials sites to less than significant levels. Similarly, mitigation would be required to reduce the significance of impacts regarding emergency response and evacuation plans, as is the case with the proposed project. Implementation of site-specific mitigation measures would reduce potential hazards to acceptable levels under this Alternative, and therefore impacts would be less than significant and similar to the proposed project.

i. Hydrology and Water Quality

Under this Alternative, the project site would be developed with future projects that would convert the undeveloped portions of the site from pervious soil to mostly impervious surfaces, similar to the proposed project. Given that the No Project/Existing Specific Plan Alternative would result in a comparable development footprint as the proposed project, it is assumed that stormwater flow volumes would be increased similar to under the proposed project. However, future development under this Alternative would also be subject to applicable stormwater regulations of the Santa Ana Regional Water Quality Control Board (RWQCB) and County of San Bernardino, which would preclude the potential for adverse impacts related to flooding, site drainage patterns, exceedance of storm drain system capacity, and floodplains/flood zones. Likewise, project-specific Stormwater Pollution Prevention Plans (SWPPPs) during construction and Water Quality Management Plans (WQMPs) during project operations, as required by the City and RWQCB, would also be implemented on-site to minimize potential impacts to water quality. Therefore, given compliance with applicable water quality regulations, impacts associated with violation of waste discharge requirements, erosion and siltation, and overall water quality degradation would be less than significant. Overall, impacts under this Alternative would be less than significant and similar to the proposed project.

j. Land Use

Under the No Project/Existing Specific Plan Alternative, no amendments to the City's General Plan or Zoning and Development Code would be required, as the existing Specific Plan has already been adopted and is reflected in the City's 2003 General Plan. Given the similarity in overall development pattern and reduction in development intensity relative to the proposed project, this Alternative is anticipated to be consistent with the goals, policies, and principles of the City's General Plan, SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Compass Growth Vision, as well as the San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP). As such, given the need for fewer land use plan amendments, impacts under this Alternative would be less than significant and less than under the proposed project.

k. Noise

This Alternative would result in the future construction and operation of a mix of urban uses on the project site, but at a lower intensity than under the proposed project. Despite the proximity of existing noise-sensitive uses (e.g., residences and schools) in portions of the project site, construction-related noise would result in less than significant impacts regarding violation of established noise standards and temporary or

periodic noise increases in the project area, similar to the proposed project. As is the case for the proposed project, groundborne noise and vibration levels would not exceed established thresholds and therefore impacts would be less than significant in this regard. However, given the future level of operational traffic in the area, due to both ambient growth and project-related growth under this Alternative, mobile-source noise sources would contribute to significant unavoidable impacts associated with permanent noise level increases along area streets. Overall, this Alternative would result in significant unavoidable noise impacts during operation, though impacts would be less than under the proposed project given the reduced project development intensity.

l. Population and Housing

The No Project/Existing Specific Plan Alternative would result in population, housing, and employment growth within the project boundaries, but to a lesser extent than under the proposed project. The growth associated with this Alternative has been accounted for in the City's most recently adopted General Plan and therefore is also reflected in the growth projections provided by SCAG. Since this Alternative would result in substantially lower population growth on-site than under the proposed project, due to the sizeable reduction in residential development intensity, impacts in this regard would also be less than significant and less than those of the proposed project. However, since this Alternative would result in the future development of substantially lower numbers of residential units, it would not provide nearly as much housing as the proposed project and as such impacts would be considered greater in this regard, though they would remain less than significant. Finally, as this Alternative would provide increased acreage for commercial uses, it is anticipated that it would result in incrementally higher employment levels than the proposed project, and as such impacts related to employment would be less than under the proposed project and less than significant.

m. Public Services

(1) Fire Protection

Under the No Project/Existing Specific Plan Alternative, increased demands for fire protection services and fire flow facilities (i.e., upgrades to existing lines and/or additional fire hydrants) would occur relative to existing conditions. The No Project/Existing Specific Plan Alternative would reduce impacts related to the delivery of fire protection services that might otherwise occur under the proposed project from impacts to area traffic flow from construction activities or operational traffic. Further, the No Project/Existing Specific Plan Alternative would result in substantially lower population increases on-site, which would require incrementally less equipment, staff, and facilities compared to the proposed project. Therefore, impacts of the No Project/Existing Specific Plan Alternative relative to fire services would be less than significant and less than those associated with the proposed project.

(2) Police Protection

This Alternative would intensify existing on-site land uses and therefore would incrementally increase the demand for police protection services relative to existing conditions. Development of this Alternative could impact the response times of emergency vehicles due to increased traffic flow in the area from the new development projects on-site, or from construction activities at the project site and its surrounding area. However, given the decrease in additional population relative to the proposed project, it is anticipated that impacts to police protection services would be less than significant, and would be less than those of the proposed project.

(3) Schools

Since the No Project/Existing Specific Plan Alternative would directly and indirectly generate additional students, there would be an increased demand on schools in the project area relative to existing conditions. Population growth, and associated student generation, would be substantially less under this Alternative than under the proposed project. Impacts to schools, similar to the proposed project, would be reduced to a less than significant level via the payment of developer impact fees in accordance with State law. Given the reduction in student generation, however, impacts relative to schools would be less under the No Project/Existing Specific Plan Alternative compared to the proposed project.

(4) Libraries

This Alternative would result in an increased demand for library services relative to existing conditions. Although this Alternative would result in a net increase residents relative to existing conditions, and potential impacts to library services and facilities associated with the proposed project would be less than significant, given the reduction in population growth relative to the proposed project, impacts would also be less than significant under this Alternative. Therefore, impacts under the No Project/Existing Specific Plan Alternative would be less than the proposed project.

(5) Parks and Recreation

The No Project/Existing Specific Plan Alternative would generate new residents to the project area and is therefore expected to impact parks and recreational facilities in the area. However, potential impacts to park and recreational facilities associated with this Alternative would be reduced to a less than significant level via compliance with Quimby Act and City requirements for additional recreational and park amenities within the project site, payment of in-lieu fees, or a combination of the two. Given the reduction in population growth relative to the proposed project, impacts would also be less than significant under this Alternative. Therefore, impacts under this Alternative would be less than the proposed project.

n. Traffic and Circulation

The No Project/Existing Specific Plan Alternative would generate additional traffic at the project site, which could adversely affect the function and associated level of service (LOS) of intersections and roadway segments in the project area. However, impacts to the traffic system, including SANBAG CMP facilities (i.e., major regional thoroughfares, freeways, on- and off-ramps, and associated intersections), would be reduced to less than significant levels through implementation of applicable mitigation measures, and thus this Alternative would avoid a significant unavoidable impact to intersection level of service that would occur under the proposed project. Since this Alternative would not trigger significant traffic system impact, its impact regarding conflicts with plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system, including the County's CMP, though given the incremental decrease in development intensity and associated traffic generation under this Alternative, impacts would be less than under the proposed project. Impacts related to traffic hazards/access, parking capacity, and conflicts with alternative transportation plans, policies, or programs would be less than significant, similar to the proposed project, since future projects on-site under the adopted Specific Plan would be subject to site plan review to address traffic safety and access issues, as well as parking adequacy, and would be required to provide public transit improvements, as well as pedestrian and bicycle facilities, within the project area.

o. Utilities and Service Systems

(1) Water Supply

The No Project/Existing Specific Plan Alternative would require additional on-site water distribution system improvements to serve future uses. As off-site facilities within both the Fontana Water Company (FWC) and Cucamonga Valley Water District (CVWD) service areas currently exist in the project area that could serve on-site uses, and future projects would be required to construct or fund construction of necessary on-site water system improvements, impacts related to water infrastructure would be less than significant, similar to the proposed project. Further, this Alternative would require additional water supplies from both FWC and CVWD to serve future uses, but given the reduction in development intensity on-site under this Alternative, such demands would be less than the proposed project. Based on the determination by FWC and CVWD regarding their ability to serve the proposed project in their respective project-specific Water Supply Assessments (WSAs), FWC and CVWD would have adequate supplies of water to serve future uses under this Alternative, and impacts would be less than significant. Since the adopted Specific Plan was previously approved prior to enactment of SB610, development on-site under this Alternative would not be subject to its requirements for preparation of a WSA; however, future residential subdivisions on-site with 500 or more dwelling units would be required to provide "written verification" from FWC and CVWD, as appropriate, to demonstrate water availability for the project pursuant to SB 221, as under the proposed project. Therefore, impacts in this regard would be less than significant and similar to the proposed project.

(2) Wastewater

The No Project/Existing Specific Plan Alternative would generate additional wastewater on-site, but at a lower rate than the proposed project based on the incremental reduction in development intensity. On-site infrastructure improvements would be required, as under the proposed project, and such improvements would connect to the Inland Empire Utilities Agency (IEUA) trunk sewer and treatment system. Given the reduction in development intensity under this Alternative and associated reduction in wastewater generation, impacts to the wastewater conveyance and treatment system would be less than under the proposed project and would be less than significant with mitigation, as it would not compromise IEUA's ability to meet RWQCB treatment requirements, result in significant environmental effects associated with construction of new wastewater facilities, and would not exceed the IEUA's wastewater treatment capacity.

(3) Solid Waste

The No Project/Existing Specific Plan Alternative would generate additional solid waste on-site, during both construction and operation, but at a lower rate than the proposed project based on the incremental reduction in development intensity. Given the reduction in development intensity under this Alternative and associated reduction in solid waste generation, impacts to disposal capacity at the Mid-Valley Landfill would be less than under the proposed project and would be less than significant, as this facility has adequate capacity to accept solid waste from the proposed project in the long-term, and this Alternative would generate less waste requiring disposal.

3. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

The extent to which this Alternative would meet each of the stated objectives of the proposed project is summarized below in Table 5-2. The No Project/Existing Specific Plan Alternative would at least partially meet all of the project objectives, and would fully meet four of them. Specifically, this Alternative would create a vibrant community by incorporating a diversity of uses including retail, office, business park,

residential, schools, parks, trails, and open space uses (Goal 1), though it would not integrate such uses to the extent the proposed project would given the physical separation between land use districts, limited vehicular and non-vehicular circulation system/facilities, and lack of activity "nodes" that foster community interaction. This Alternative would create organizing elements that provide a community identity and opportunity for social interaction (Goal 2), but not to the extent the proposed project would, as noted above for Goal 1. However, this Alternative does provide a plan that generates employment opportunities and improves the city's tax base (Goal 3, and establishes a corporate corridor (Goal 4). This Alternative provides pedestrian friendly connectivity to main activity areas, including employment, shopping, schools and recreation (Goal 5), but as noted above does not include as extensive a network of pedestrian facilities as the proposed project. The Existing Specific Plan does create a limited diversity of housing types within an improved setting with various amenities (Goal 6), but only allows for single-family and relatively low density multi-family housing on-site, while the proposed project includes a much wider range of housing types and densities and extensive public amenities to serve the community. While this Alternative would create a village structure (Goal 7), the physical integration of mutually supportive land uses that would provide a "village" environment would not be provided to the extent it would under the proposed project based on the physical separation of land use districts. The No Project/Existing Specific Plan Alternative would provide quality master planning, architectural and landscape architectural standards (Goal 8), but as indicated above would only partially develop a compact community to promote a healthy village character, enhance sustainability and conserve resources (Goal 9). Nonetheless, this Alternative would create a community with a high quality of life (Goal 10).

5. ALTERNATIVES
C. ALTERNATIVE 3: HISTORIC PRESERVATION ALTERNATIVE

1. DESCRIPTION OF THE ALTERNATIVE

The Historic Preservation Alternative would develop the project site with a development pattern and footprint nearly identical to the proposed Specific Plan within Falcon Ridge Village, Westgate Village, and Westgate Village East. However, this Alternative would not propose any development within Westgate Center (including Planning Areas 12 through 26 of the proposed Specific Plan) in order to avoid impacts to existing historical resources, including the on-site vineyards, water tank, water system, and farmstead site CA-SBR-7324H). As such, the Historic Preservation Alternative would result in an overall reduction in development intensity within the Specific Plan area, with a reduction of 85.0 acres of Business Park uses (designated Mixed-Use 1), 2,037 residential units (or 87.1 acres of residential uses), and 37.4 acres of open space areas. The development scenario under this Alternative, therefore, would include 3,373 residential units, 166.5 acres of Business Park uses (Mixed-Use 1, 2, and 3 designations), 50.9 acres of commercial retail uses, a 60.0-acre high school, two 12-acre elementary schools (totaling 24.0 acres), and 121.15 acres of open space areas. All other improvements and amenities provided as part of the proposed Specific Plan outside the Westgate Center village area would also be included in this Alternative development scenario.

2. ENVIRONMENTAL IMPACTS

a. Aesthetics/Visual Resources

(1) Views/Scenic Vistas

This Alternative would result in a similar development pattern as the proposed project, with a maximum structural height of 60 feet for commercial and high-density residential uses as under the proposed Specific Plan, but would not allow development within the Westgate Center village portion of the site. As such, this Alternative would incrementally reduce view obstructions of scenic vistas in the project area, most notably views of the San Gabriel Mountains to the north, San Bernardino Mountains to the east, and Jurupa Hills to the south. View obstructions of these scenic resources would be reduced from locations within and surrounding the Westgate Center portion of the site, including from vantage points along City-designated scenic corridors within and adjacent to the project boundaries, and views overall would not be substantially affected by construction of future projects on-site under this Alternative. As such, given the reduction in development intensity under the Historic Preservation Alternative, impacts to scenic vistas would remain less than significant, though impacts would be less than under the proposed project.

(2) Aesthetics/Visual Character

This Alternative would improve the project site with a mix of urban uses that would be developed according to the same proposed development standards and design guidelines as for the proposed Specific Plan, except that no development would be proposed within the Westgate Center portion of the site. Furthermore, the design theme and overall development pattern would be comparable to that of the proposed project, and as such this Alternative would provide a consistent design theme and unified architecture, landscaping, lighting, and signage features that would result in a beneficial impact related to aesthetics and visual character. Therefore, impacts would be less than significant and similar to those of the proposed project.

(3) Light and Glare

Under the Historic Preservation Alternative, new sources of light and glare would be introduced to the undeveloped portions of the project site, with the exception of the Westgate Center portion of the project site, as would be the case for the proposed project. While light and glare effects would be increased under this Alternative relative to existing conditions, such light and glare impacts are not expected to be significant given adherence to the proposed Specific Plan lighting standards and landscaping and screening requirements. As such, impacts related to light and glare effects would be less than significant, and would be incrementally reduced given the lack of development within the Westgate Center portion of the site.

b. Agriculture and Forestry Resources

The Historic Preservation Alternative would result in urban development throughout the project site, with the exception of the Westgate Center portion, the majority of which is designated as Unique Farmland by the California Department of Conservation. Although this are of Unique Farmland would be preserved under this Alternative, development would still occur on land designated as Unique Farmland within other areas of the project site, including the northern portion of Westgate Village and the majority of Westgate Village East, and as such it would also result in the physical conversion of farmland to non-agricultural use. Therefore, significant unavoidable impacts to agricultural resources would still result from implementation of this Alternative, though impacts would be incrementally less than under the proposed project given the preservation of Unique Farmland within the Westgate Center portion of the site.

c. Air Quality

The Historic Preservation Alternative would allow for a similar mix of development on the project site, but at a lower overall intensity than the proposed project due to the elimination of proposed used within the Westgate Center portion of the site. While construction activities would be of a similar nature and intensity as the proposed project for any given future development under this Alternative, and therefore worst-case daily emissions would exceed thresholds as under the proposed project, the overall duration and frequency of construction activities would be incrementally reduced based on the overall reduction in development intensity on-site. Therefore, although construction emissions impacts under this Alternative would be significant and unavoidable due to the exceedance of established daily localized and regional emissions thresholds, impacts would be less than the proposed project due to lower overall level of construction activity. Similarly, operational emissions, while reduced due to lower overall project development intensity, would exceed established thresholds and result in significant unavoidable localized and regional air quality impacts. Given the proximity of sensitive land uses to major freeway corridors, as is the case for the proposed project, impacts related to toxic air contaminants would also be significant and unavoidable, though impacts would be incrementally reduced given the reduction in overall residential development and associated numbers of people exposed to such contaminants. Impacts related to odors would be reduced relative to the proposed project due to lower development intensity on-site, and would remain less than significant.

d. Biological Resources

Under this Alternative, the majority of the project site would be developed with urban uses, as is the case under the proposed project, with the exception of the Westgate Center portion of the site, which does not contain any sensitive species or habitats (refer to Figure 4.D-3, *Plant Communities*, in Section 4.D, Biological

Resources, of this Draft EIR), but does contain one maintained channel, which is under the jurisdiction of the California Department of Fish and Wildlife (refer to Figure 4.D-4, *Jurisdictional Features*, in Section 4.D of this Draft EIR). Although development intensity under the Historic Preservation Alternative would be reduced relative to the proposed project, conversion of the remaining undeveloped portions of the project area to urban uses would affect existing resources in a similar manner to the proposed project, except that this Alternative would avoid potential impacts to the existing maintained channel within the Westgate Center portion of the site. Since the remainder of the project site would be ultimately developed, as under the proposed project, impacts related to sensitive species, riparian habitat, wetlands/jurisdictional features, and wildlife movement in those portions of the site would be comparable to those of the proposed project and would be reduced to less than significant with implementation of applicable mitigation measures. Nonetheless, given the avoidance of impacts to jurisdictional features within the Westgate Center portion of the site, impacts in this regard would be reduced compared to the proposed Specific Plan. However, impacts associated with consistency with regulatory framework and conflicts with Habitat Conservation or Natural Community Conservation Plans would be less than significant and similar to the proposed project.

e. Cultural Resources

The Historic Preservation Alternative would allow for the future construction of urban uses within the project site with a similar type of development pattern and grading and construction activities as the proposed project, but would avoid any development or other physical impacts within the Westgate Center portion of the site. The Westgate Center portion of the site contains existing historical resources, including the on-site vineyards, water tank, water system, and farmstead site CA-SBR-7324H). Therefore, this Alternative, unlike the proposed project, would not have the potential to physically affect these known historic resources, and would thus avoid a significant unavoidable impact to historic resources that would occur under the proposed project without the need for mitigation. Although this Alternative would allow for the development of the remainder of the projects site, and thus could potentially affect undiscovered archaeological and paleontological resources, including human remains, in those areas, the avoidance of grading, excavation, and other physical changes within the Westgate Center portion of the site would reduce this potential relative to the proposed project. Site clearing and grading activities on-site would have the highest potential to adversely affect such resources, as is the case under the proposed project, though implementation of applicable mitigation measures would reduce this potential. Therefore, impacts under this Alternative would be less than under the proposed project as no impacts to historic resources would occur and impacts to archaeological and paleontological resources would be less than significant with mitigation.

f. Geology and Soils

The Historic Preservation Alternative would allow for future development of the site with new residential, commercial, business park, and school uses at a much higher intensity than exists on the site currently, as is the case with the proposed project. However, given the decrease in development on-site relative to the proposed project, this Alternative would expose fewer people to risks associated with seismic ground shaking. Similarly, given the high collapsible soil potential at the project site, this Alternative would expose people to secondary seismic risks due to seismic ground failure, but to a lesser extent than the proposed project. Mitigation would still be required under this Alternative with regard to foundation design and/or soil treatments to address ground shaking and associated ground settlement hazards, but impacts in this regard would be less than the proposed project. Since this Alternative would require incrementally less excavation and grading activities compared to the proposed project, it would result in reduced impacts

regarding soil erosion or the loss of topsoil. However, as is the case with the proposed project, given compliance with applicable water quality regulations, these impacts would be reduced to a less than significant level. As such, given the decrease in the amount of grading and excavation under this Alternative, impacts in this regard would be less than the proposed project and less than significant, as lower development intensity on-site would expose fewer people and structures to risks associated with geologic hazards.

g. Greenhouse Gas Emissions

The Historic Preservation Alternative would allow for the future development of the project site with a mix of urban uses similar to the proposed project, but at a lower overall intensity given the lack of development within the Westgate Center portion of the site. As such, although greenhouse gas emissions resulting from construction and operation of future uses would be incrementally lower relative to the proposed project, impacts would still require mitigation to be reduced to less than significant. Likewise, impacts related to consistency with GHG reduction plans would be less than significant with mitigation under this Alternative, as is the case for the proposed project. Given the reduction in development intensity and associated greenhouse gas emissions, impacts would be less than the proposed project.

h. Hazards and Hazardous Materials

This Alternative, like the proposed project, would require that existing potential hazardous materials conditions on-site be adequately addressed prior to development of future uses. Mitigation measures prescribed for the proposed project would also be necessary under this Alternative in order to reduce impacts related to hazardous materials releases, hazardous emissions near schools, and listed hazardous materials sites to less than significant levels, though the lack of development within the Westgate Center portion of the site would reduce the potential for such impacts relative to the proposed project. Similarly, mitigation would be required to reduce the significance of impacts regarding emergency response and evacuation plans, as is the case with the proposed project, but potential impacts would be incrementally reduced given the overall reduction in development intensity on-site. Implementation of site-specific mitigation measures would reduce potential hazards to acceptable levels under this Alternative, and therefore impacts would be less than significant and less than the proposed project.

i. Hydrology and Water Quality

Under this Alternative, all of the project site except the Westgate Center portion would be developed with future projects that would convert these undeveloped portions of the site from pervious soil to mostly impervious surfaces, similar to the proposed project. However, as the Historic Preservation Alternative would result in a reduced development footprint compared to the proposed project, it is assumed that stormwater flow volumes would also be decreased relative to the proposed project based on the preservation of the existing undeveloped pervious surface area within the Westgate Center portion of the project site. With regard to storm drain infrastructure, the proposed Specific Plan's storm drain master plan would also be implemented under this Alternative in all other areas except Westgate Center, which would ensure that storm drain infrastructure serving the site is constructed as development occurs. Additionally, future development under this Alternative would also be subject to applicable stormwater regulations of the Santa Ana Regional Water Quality Control Board (RWQCB) and County of San Bernardino, and would also implement the proposed Specific Plan's site-wide Water Quality Management Plan (WQMP), as applicable, which would preclude the potential for adverse impacts related to flooding, site drainage patterns,

exceedance of storm drain system capacity, and floodplains/flood zones. Likewise, project-specific Stormwater Pollution Prevention Plans (SWPPPs) during construction and WQMPs for project operations, as required by the City and RWQCB, would also be implemented on-site to minimize potential impacts to water quality. Therefore, given compliance with applicable water quality regulations, impacts associated with violation of waste discharge requirements, erosion and siltation, and overall water quality degradation would be less than significant. Overall, impacts under this Alternative would be less than significant and less than under the proposed project.

j. Land Use

The required amendments to the City's General Plan and Zoning and Development Code under the proposed Specific Plan would also be necessary under the Historic Preservation Alternative, but changes to the Westgate Center portion of the site would not be necessary. Given the similarity in overall development pattern in the remaining villages and overall reduction in development intensity relative to the proposed project, this Alternative is anticipated to be consistent with the goals, policies, and principles of the City's General Plan, SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Compass Growth Vision, as well as the San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP). As such, impacts under this Alternative would be less than significant and less than under the proposed project.

k. Noise

This Alternative would result in the future construction and operation of a similar mix of urban uses on the project site as under the proposed Specific Plan, but at a lower intensity given the lack of development within the Westgate Center portion of the site. Despite the proximity of existing noise-sensitive uses (e.g., residences and schools) in portions of the project site, construction-related noise would result in less than significant impacts regarding violation of established noise standards and temporary or periodic noise increases in the project area, and would be reduced in terms of duration and overall intensity compared to the proposed project. As is the case for the proposed project, groundborne noise and vibration levels would not exceed established thresholds and therefore impacts would be less than significant in this regard, though impacts would occur for a shorter duration and therefore would be less than under the proposed project. Similarly, given the future level of operational traffic in the area, due to both ambient growth and project-related growth under this Alternative, mobile-source noise sources would contribute to significant unavoidable impacts associated with permanent noise level increases along area streets, but such noise level increases would be reduced compared to the proposed project. Overall, this Alternative would result in significant unavoidable noise impacts during operation, though impacts would be less than under the proposed project given the reduced overall development intensity and associated traffic levels.

l. Population and Housing

The Historic Preservation Alternative would result in population, housing, and employment growth within the project boundaries, but to a lesser extent than under the proposed project given the lack of development within the Westgate Center portion of the site. The growth associated with this Alternative would therefore be within the growth projections provided by SCAG, as is the case for the proposed project. Since this Alternative would result in substantially lower population growth on-site than under the proposed project, due to the sizeable reduction in residential development intensity, impacts in this regard would also be less than significant and less than those of the proposed project. However, since this Alternative would result in

the future development of substantially lower numbers of residential units, it would not provide nearly as much housing as the proposed project and as such impacts would be considered greater in this regard, though they would remain less than significant. Finally, as this Alternative would provide a reduced amount of mixed-use/business park uses, it is anticipated that it would result in a reduction in employment opportunities compared to the proposed project, and as such impacts related to employment would be greater than the proposed project but would still be less than significant.

m. Public Services

(1) Fire Protection

Under the Historic Preservation Alternative, increased demands for fire protection services and fire flow facilities (i.e., upgrades to existing lines and/or additional fire hydrants) would occur relative to existing conditions. The Historic Preservation Alternative would reduce impacts related to the delivery of fire protection services that might otherwise occur under the proposed project from impacts to area traffic flow from construction activities or operational traffic. Further, the Historic Preservation Alternative would result in substantially lower population increases on-site, which would require incrementally less equipment, staff, and facilities compared to the proposed project. Therefore, impacts of the Historic Preservation Alternative relative to fire protection services would be less than significant and less than those associated with the proposed project.

(2) Police Protection

This Alternative would intensify existing on-site land uses and therefore would incrementally increase the demand for police protection services relative to existing conditions. Development of this Alternative could impact the response times of emergency vehicles due to increased traffic flow in the area from the new development projects on-site, or from construction activities at the project site and its surrounding area. However, given the decrease in additional population relative to the proposed project, it is anticipated that impacts to police protection services would be less than significant, and would be less than those of the proposed project.

(3) Schools

Since the Historic Preservation Alternative would directly and indirectly generate additional students, there would be an increased demand on schools in the project area relative to existing conditions. Population growth, and associated student generation, would be substantially less under this Alternative than under the proposed project. Impacts to schools, similar to the proposed project, would be reduced to a less than significant level via the payment of developer impact fees in accordance with State law. Given the reduction in student generation, however, impacts relative to schools would be less under the Historic Preservation Alternative compared to the proposed project.

(4) Libraries

This Alternative would result in an increased demand for library services relative to existing conditions. Although this Alternative would result in a net increase residents relative to existing conditions, and potential impacts to library services and facilities associated with the proposed project would be less than significant, given the reduction in population growth relative to the proposed project, impacts would also be

less than significant under this Alternative. Therefore, impacts under the Historic Preservation Alternative would be less than the proposed project.

(5) Parks and Recreation

The Historic Preservation Alternative would generate new residents within the project area and is therefore expected to impact parks and recreational facilities in the area. However, potential impacts to park and recreational facilities associated with this Alternative would be reduced to a less than significant level via compliance with Quimby Act and City requirements for additional recreational and park amenities within the project site, payment of in-lieu fees, or a combination of the two. Given the reduction in population growth relative to the proposed project, impacts would also be less than significant under this Alternative. Therefore, impacts under this Alternative would be less than the proposed project.

n. Traffic and Circulation

The Historic Preservation Alternative would generate additional traffic at the project site, which could adversely affect the function and associated level of service (LOS) of intersections and roadway segments in the project area. However, impacts to the traffic system, including SANBAG CMP facilities (i.e., major regional thoroughfares, freeways, on- and off-ramps, and associated intersections), would be reduced to less than significant levels through implementation of applicable mitigation measures, and thus this Alternative would avoid a significant unavoidable impact to intersection level of service that would occur under proposed project. Since this Alternative would not trigger significant traffic system impact, its impact regarding conflicts with plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system, including the County's CMP, though given the incremental decrease in development intensity and associated traffic generation under this Alternative, impacts would be less than under the proposed project. Impacts related to traffic hazards/access, parking capacity, and conflicts with alternative transportation plans, policies, or programs would be less than significant, similar to the proposed project, since future projects on-site under the adopted Specific Plan would be subject to site plan review to address traffic safety and access issues, as well as parking adequacy, and would be required to provide public transit improvements, as well as pedestrian and bicycle facilities, within the project area.

o. Utilities and Service Systems

(1) Water Supply

The Historic Preservation Alternative would require additional on-site water distribution system improvements to serve future uses. As off-site facilities within both the Fontana Water Company (FWC) and Cucamonga Valley Water District (CVWD) service areas currently exist in the project area that could serve on-site uses, and future projects would be required to construct or fund construction of necessary on-site water system improvements, impacts related to water infrastructure would be less than significant, similar to the proposed project, though such improvements would not be necessary within the Westgate Center portion of the site given the lack of development in this area. Further, this Alternative would require additional water supplies from both FWC and CVWD to serve future uses, but given the reduction in development intensity on-site under this Alternative, such demands would be less than the proposed project. Based on the determination by FWC and CVWD regarding their ability to serve the proposed project in their respective project-specific Water Supply Assessments (WSAs), FWC and CVWD would have adequate supplies of water to serve future uses under this Alternative, and impacts would be less than significant.

This Alternative, similar to the proposed Specific Plan, would be subject to the requirements of SB 610, and likewise, future residential subdivisions on-site with 500 or more dwelling units would be required to provide "written verification" from FWC and CVWD, as appropriate, to demonstrate water availability for the project pursuant to SB 221, as under the proposed project. Therefore, impacts to water supply would be less than significant and less than under the proposed project.

(2) Wastewater

The Historic Preservation Alternative would generate additional wastewater on-site, but at a lower rate than the proposed project based on the incremental reduction in development intensity. On-site infrastructure improvements would be required, as under the proposed project but with the exception of the Westgate Center portion of the site, and such improvements would connect to the Inland Empire Utilities Agency (IEUA) trunk sewer and treatment system. Specifically, this Alternative would also implement the proposed Specific Plan's Sewer Master Plan, which is designed to adequately serve all on-site uses. Given the reduction in development intensity under this Alternative and associated reduction in wastewater generation, impacts to the wastewater conveyance and treatment system would be less than under the proposed project and would be less than significant with mitigation, as it would not compromise IEUA's ability to meet RWQCB treatment requirements, result in significant environmental effects associated with construction of new wastewater facilities, and would not exceed the IEUA's wastewater treatment capacity.

(3) Solid Waste

The Historic Preservation Alternative would generate additional solid waste on-site, during both construction and operation, but at a lower rate than the proposed project based on the incremental reduction in development intensity. Given the reduction in development intensity under this Alternative and associated reduction in solid waste generation, impacts to disposal capacity at the Mid-Valley Landfill would be less than under the proposed project and would be less than significant, as this facility has adequate capacity to accept solid waste from the proposed project in the long-term, and this Alternative would generate less waste requiring disposal.

3. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

The extent to which this Alternative would meet each of the stated objectives of the proposed project is summarized below in Table 5-2. The Historic Preservation Alternative would at least partially meet all of the project objectives, and would fully meet eight of them. Specifically, this Alternative would create a vibrant community by incorporating a diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses (Goal 1), in the same manner the proposed project would but to a lesser extent, and would also create organizing elements that provide a community identity and opportunity for social interaction (Goal 2). However, while this Alternative does provide a plan that generates employment opportunities and improves the city's tax base (Goal 3), it does not provide the level of development intensity that the proposed project does and therefore would not generate as much tax revenue within the City. The Historic Preservation Alternative establishes a corporate corridor (Goal 4) as under the proposed project, but it lacks the connectivity provided by the proposed project given the lack of development within Westgate Center. This Alternative provides pedestrian friendly connectivity to main activity areas, including employment, shopping, schools and recreation (Goal 5), but such connectivity would not be continuous as under the proposed project, as it would include only a portion of the network of pedestrian facilities as the proposed project. This Alternative also provides a limited diversity of housing types within an improved setting with various amenities (Goal 6), but would eliminate single- and multi-family development at a

variety of densities within the Westgate Center portion of the site, while the proposed project includes a wider range of housing types and densities and additional public amenities to serve the community. This Alternative would create a village structure (Goal 7) in those areas where development is proposed, similar to the proposed project, and would provide quality master planning, architectural and landscape architectural standards (Goal 8). Furthermore, the Historic Preservation Alternative would also develop a compact community to promote a healthy village character, enhance sustainability and conserve resources (Goal 9), and would create a community with a high quality of life (Goal 10).

.

5. ALTERNATIVES
D. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the *CEQA Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The *Guidelines* also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this Draft EIR, the range of feasible alternatives includes the No Project/No Build Alternative, the No Project/Existing Specific Plan Alternative, and the Historic Preservation Alternative.

A comparative summary of the environmental impacts anticipated under each Alternative with the environmental impacts associated with the proposed project is provided in Table 5-1 above. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the *CEQA Guidelines*, the analysis below addresses the ability of the Alternatives to "avoid or substantially lessen one or more of the significant effects" of the project.

Of the Alternatives analyzed in the Draft EIR, the No Project/No Build Alternative is considered the overall environmentally superior alternative as it would reduce the vast majority of the project impacts and avoid the project's significant impacts regarding agriculture and forestry resources (farmland conversion), conflicts with the applicable AQMP, short-term construction-related air quality impacts, permanent loss of known historic resources, long-term operational impacts relative to air quality and noise, and operational impacts to intersection levels of service. However, as indicated above, this Alternative would not meet any of the project objectives. The extent to which each project Alternative would meet each of the stated objectives of the proposed project is summarized below in Table 5-2.

In accordance with the *CEQA Guidelines* requirement to identify an environmentally superior alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that the Historic Preservation Alternative would be the environmentally superior alternative, relative to the other alternatives. It would eliminate the project's significant impact to historic resources and intersection levels of service (though the significant intersection impact would only occur if R-4 residential uses are developed within Planning Area 24) and would also reduce the project's significant air quality, agriculture and forestry resources, and noise impacts to a greater extent than the other alternatives; however, these impacts would remain significant and unavoidable. Further, while this alternative does reduce some project impacts, it would result in greater impacts relative to population and housing; specifically, this Alternative would not provide as many housing units or employment opportunities on-site as would the proposed project. However, since this reduction in on-site housing and employment provision does not necessarily translate to a physical environmental impact, impacts are not considered significant or substantially more severe than under the proposed project.

Table 5-2

Comparison of Alternatives' Ability to Meet Project Objectives

Project Objective	Ability to Meet Project Goal/Objective			
	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan Alternative	Alternative 3: Historic Preservation Alternative
Goal 1: In order to create a vibrant community, incorporate a rich diversity of uses including retail, office, business park, residential, schools, parks, trails, and open space uses.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Partially Meets Objective
Goal 2: Create organizing elements that provide a community identity and opportunity for social interaction.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective
Goal 3: Develop a plan that generates employment opportunities and improves the city's tax base.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Partially Meets Objective
Goal 4: Develop a plan that establishes a corporate corridor.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Partially Meets Objective
Goal 5: Create pedestrian friendly connectivity to main activity nodes, including employment, shopping, schools and recreation.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Partially Meets Objective
Goal 6: Create a diversity of housing types within a high amenity setting.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Partially Meets Objective
Goal 7: Create a village structure.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective

Table 5-2 (Continued)

Comparison of Alternatives' Ability to Meet Project Objectives

Project Objective	Ability to Meet Project Goal/Objective			
	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: No Project/Existing Specific Plan Alternative	Alternative 3: Historic Preservation Alternative
Goal 8: Provide quality master planning, architectural and landscape architectural standards.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective
Goal 9: Develop a compact community to promote a healthy village character, enhance sustainability and conserve resources.	Fully Meets Objective	Does Not Meet Objective	Partially Meets Objective	Fully Meets Objective
Goal 10: Create a community with a high quality of life.	Fully Meets Objective	Does Not Meet Objective	Fully Meets Objective	Fully Meets Objective

Source: PCR Services Corporation, 2014

6.0 Other Mandatory CEQA Considerations

6.0 OTHER MANDATORY CEQA CONSIDERATIONS

A. SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the *CEQA Guidelines* requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. Following is a summary of the impacts associated with the proposed project that were concluded to be significant and unavoidable. These impacts are also described in detail in Chapter 4, *Environmental Impact Analysis*, of this Draft EIR.

Agriculture and Forestry Resources: Implementation of the proposed project would accelerate the conversion of agricultural lands and loss of agricultural uses within the City and in the region. The loss of agricultural lands is considered significant on the project site and also considered cumulatively considerable from a regional perspective. Please refer to Section 4.B, *Agriculture and Forestry Resources*, of this Draft EIR for further discussion of this topic.

Air Quality: Even with the implementation of the recommended mitigation measures during construction activities, the project would, on a temporary basis, exceed the SCAQMD regional significance thresholds for NO_x and PM_{10} during the most intense construction periods. Although these impacts would be short-term in nature, construction-related impacts to air quality would be significant and unavoidable. Similarly, air pollutant emissions associated with increase vehicular traffic during project operations would exceed established thresholds, resulting in significant and unavoidable operational air quality impacts. Further, based on the proximity of sensitive land uses (i.e., residences) to major freeway thoroughfares at some locations on-site, exposure to toxic air contaminants (TACs) would also be considered a significant unavoidable air quality impact. Given these construction-related and operational physical air quality impacts, the proposed project would also result in conflicts with the applicable Air Quality Management Plan, which is also considered a significant unavoidable impact. Please refer to Section 4.C, *Air Quality*, of this Draft EIR for further discussion of this topic.

Cultural Resources: Even with the implementation of the recommended mitigation measures, implementation of the proposed Specific Plan could result in the permanent loss of existing historic resources on the project site. As such, impacts to historic resources would be significant and unavoidable. Please refer to Section 4.E, *Cultural Resources*, of this Draft EIR for further discussion of this topic.

Noise: Even with the implementation of the recommended mitigation measures, long-term operational noise associated with increase vehicular traffic would exceed acceptable noise levels at the nearest noise-sensitive receptors in the project area, and no additional mitigation measures are available to reduce the significance of such impacts. As such, noise impacts associated operation of proposed uses would be significant and unavoidable. Please refer to Section 4.K, *Noise*, of this Draft EIR for further discussion of this topic.

Transportation/Traffic: While traffic-related impacts to local intersections under the proposed Specific Plan would be reduced to less than significant with implementation of applicable mitigation measures, the additional traffic generation associated with development of R-4 residential uses on up to 20.0 acres within

Planning Area 24 could result in significant impacts to intersections even with implementation of applicable mitigation measures. As such, it is conservatively concluded that intersection impacts would be significant and unavoidable.

B. REASONS WHY THE PROJECT IS BEING PROPOSED, NOTWITHSTANDING SIGNIFICANT UNAVOIDABLE IMPACTS

In addition to identification of the project's significant unavoidable impacts, Section 15126.2(b) of the CEQA Guidelines also requires a description of the reasons why the project is being proposed, notwithstanding significant unavoidable impacts associated with the project. The reasons why this particular project has been proposed are identified in the development, design, and economic objectives included in Chapter 2, *Project Description*, of this Draft EIR. The underlying purpose of the proposed project is to create a vibrant community with high quality design elements and amenities, which includes residential, office, retail, light industrial, school, open space and recreational uses, provides a variety of housing and employment options, and fosters community interaction and non-vehicular transportation, while minimizing adverse effects on the surrounding community and the environment.

The project would provide much needed housing opportunities for those who work in the community. The project site is conveniently located immediately adjacent to two major freeways (I-15 and SR-210) and near various existing and future employment opportunities and in relative proximity of the major employment centers in the region (e.g., Cities of Ontario and San Bernardino). The project would create housing opportunities within walking distance of numerous jobs and transit options once the major components of the Specific Plan are constructed. In doing so, the project would be consistent with the goals of the community in minimizing traffic impacts and air quality impacts, as well as meeting housing needs. Furthermore, the proposed mix of uses and non-vehicular transportation improvements would enhance the walkability of the neighborhood and foster a pedestrian- and bicycle-friendly environment.

Several alternatives to the proposed project were considered in Chapter 5, *Alternatives*, of this Draft EIR. Among those alternatives, no feasible alternative other than the No Project/No Development Alternative is identified that would reduce all of the significant unavoidable effects of the proposed project. In addition, none of the alternatives would achieve the objectives to the extent the project the project would. Significant unavoidable impacts from Specific Plan implementation would result from permanent conversion of agricultural lands to non-agricultural use, regional and local construction-related air pollutant emissions, AQMP consistency, impacts to known historic resources, operational noise and air pollutant emissions, and traffic-related intersection impacts. Finally, since the No Project/No Build Alternative would not meet the underlying purpose of the project, it is not considered a feasible development alternative.

In addition to the environmental reasons why the project has been proposed as cited above, there are economic and urban planning reasons in support of the proposed development. Such reasons include City goals and policies supportive of the provision of higher density housing in proximity to employment centers, encouragement of alternative transportation, vehicle trip reduction through location of complementary land uses in proximity to one another, energy and water conservation, provision of recreational uses, and high quality urban design in development projects. Additionally, the proposed project would include a number of beneficial features, including amenities such as enhanced pedestrian facilities (including a dedicated bridge connecting the project site to existing residential uses, schools, and Pacific Electric Bike Trail to the south of the project site across Baseline Avenue), new bicycle paths connecting to regional bicycle facilities, and

extensive landscaped public open space areas. The Westgate Specific Plan would strengthen Fontana's ability to attract new residents, businesses, and retail customers by offering an integration of mutually supportive land uses in proximity to major transportation corridors, and would generate additional annual sales tax revenues to the City. It would also provide single- and multi-family housing in order to support the existing and proposed commercial uses on-site and in the surrounding area.

C. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

According to Sections 15126(c) and 15126.2(c) of the *CEQA Guidelines*, an EIR is required to address any significant irreversible environmental changes that would occur should the proposed project be implemented. As stated in *CEQA Guidelines* Section 15126.2(c):

> *"[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

The future implementation of the proposed project would necessarily consume limited, slowly renewable, and non-renewable resources. This consumption would occur during the construction phases of future projects and would continue throughout their operational lifetimes. Future project development would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project site. Future project construction would also require the consumption of resources that are non-replenishable or may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: certain types of lumber and other forest products; aggregate materials used in concrete and asphalt such as sand, gravel and stone; metals such as steel, copper, and lead; petrochemical construction materials such as plastics; and water. Furthermore, nonrenewable fossil fuels such as gasoline and oil would also be consumed in the use of construction vehicles and equipment, as well as the transportation of goods and people to and from the project site.

Project operation would continue to expend nonrenewable resources that are currently consumed within the City of Fontana. These include energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water. Fossil fuels would represent the primary energy source associated with both construction and ongoing operation of the project, and the existing, finite supplies of these natural resources would be incrementally reduced. Project operation would occur in accordance with Title 24, Part 6 of the California Code of Regulations, as wells as numerous local regulations and proposed project design features which establish conservation practices that would limit the amount of energy consumed by the project. However, the energy requirements associated with the project would still represent a long-term commitment of essentially nonrenewable resources.

Continued use of such resources would be on a relatively small scale and consistent with regional and local growth forecasts in the area, as well as state and local goals for reductions in the consumption of such

resources. Further, the project would not affect access to existing resources, nor interfere with the production or delivery of such resources.

The project includes numerous project design features that would reduce the consumption of non-renewable resources (refer to Chapter 2, *Project Description*, of this Draft EIR). Given the proposed land use plan that provides complementary land uses in proximity to one another and the Specific Plan's non-vehicular transportation improvements, the project would support pedestrian access to a considerable range of retail destinations, employment centers, schools, and recreational facilities both within and outside the project boundaries. The project also provides excellent access to the regional transportation system as it is located in proximity to numerous bus lines and the I-15 and SR-210 freeways. These factors would contribute to a land use pattern that is considered to reduce the consumption of non-renewable resources. Hence, the consumption of the nonrenewable resources would not result in significant irreversible changes to the environment.

D. GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the *CEQA Guidelines* requires an EIR to discuss the ways the proposed project could foster economic or population growth or the construction of additional housing, directly or indirectly, in the surrounding environment. Growth-inducing impacts include the removal of obstacles to population growth (e.g., the expansion of a wastewater treatment plant allowing more development in a service area) and the development and construction of new service facilities that could significantly effect the environment individually or cumulatively. In addition, growth must not be assumed as beneficial, detrimental, or of little significance to the environment.

The proposed project would allow for the future development of up to 6,410 dwelling units as well as commercial retail, office, warehouse, light industrial, school, and open space/recreational uses within the project boundaries. The future development of new residential units and commercial and school uses would not cause a progression of growth beyond the project area itself. The project site is located in an area surrounded by urbanized land, and is served by current infrastructure (e.g., roads and utilities), and community service facilities (e.g., police, fire, schools, and libraries). The project's only infrastructure improvements would consist of tie-ins to, and extensions of, the existing utility main-lines already serving the project area.

The proposed project's 6,410 residential units would directly generate a residential population of approximately 25,448 new residents, while the new commercial, business park, and school uses on-site would indirectly generate 3,460 new residents, for a total project-related population growth of 28,908 persons. While this generated population growth would be substantial, it would not exceed the established SCAG regional, subregional, and local growth forecasts for the City of Fontana.

Therefore, the project would not spur additional growth in Fontana other than that already anticipated in the SCAG growth forecasts, and would not eliminate impediments to growth. Therefore, the project would not foster growth inducing impacts.

E. POTENTIAL SECONDARY EFFECTS

Section 15126.4(a)(1)(D) of the *CEQA Guidelines* requires mitigation measures to be discussed in less detail than the significant effects of the proposed project if the mitigation measure(s) would cause one or more significant effects in addition to those that would be caused by the project as proposed. With regard to this section of the *CEQA Guidelines*, the proposed project mitigation measures that could cause potential impacts were evaluated. The following provides a discussion of the potential secondary effects that could occur as a result of the implementation of the project mitigation measures. For the reasons stated below, it is concluded that the project's mitigation measures would not result in significant secondary impacts.

1. Aesthetics/Visual Resources

Impacts regarding aesthetics and visual resources are less than significant and no mitigation measures are required. Therefore, no secondary impacts would occur due to the implementation of mitigation measures for this environmental topic.

2. Agriculture and Forestry Resources

Mitigation Measure B-1 requires that the portions of the project site that are designated as Unique Farmland be made available for ongoing agricultural activities until such time as development projects are implemented on those portions of the Specific Plan area. Mitigation Measure B-2 requires that the project applicant make displaced topsoil from areas of the project site mapped as Unique Farmland available to off-site agricultural facilities and operations in order to increase productivity of farmland in the region, and also requires that on-site land designated either as Unique Farmland or otherwise to be preserved for potential agricultural activities. As this mitigation measure would result in the conservation of agricultural land and soil resources and would serve to at least partially offset the loss of existing agricultural land, it would not contribute to any adverse secondary effects.

3. Air Quality

Mitigation Measures C-1 through C-8 require that project construction practices be carried out in a manner that reduces the level of air quality emissions. As such, these mitigation measures would directly reduce environmental impacts of the proposed project and would not result in secondary impacts for their implementation. The consumption of water for dust suppression, Mitigation Measure C-7, would be negligible and temporary and therefore would not contribute to long-term impacts related to water supply. Mitigation Measures C-9 through C-14 require that additional project-specific air quality modeling and analysis be performed regarding future operation of sensitive uses in proximity to light industrial uses and existing freeway corridors, and further that programs be implemented on-site during project operation to minimize air pollutant emissions from proposed uses. These measures would result in reduced environmental impacts regarding air quality and would not result in any adverse secondary effects.

4. Biological Resources

Mitigation Measures D-1 through D-3 require that consultation with wildlife agencies and implementation of Best Management Practices (BMPs) be conducted to reduce physical impacts to sensitive wildlife and associated habitats on-site, including surveys, development of habitat mitigation plans, and habitat replacement intended to avoid net losses of such resources. Similarly, Mitigation Measure D-4 requires that

future project applicants obtain appropriate permits from affected regulatory agencies regarding jurisdictional features on-site, the permit conditions for which include on- or off-site replacement of affected resources. Mitigation Measure D-5 requires surveys for nesting migratory birds in the project area, and avoidance of nests during the nesting season. These mitigation measures would minimize or avoid overall losses of sensitive resources and would not result in any significant secondary effects.

5. Cultural Resources

Mitigation Measure E-1 requires that an eligibility evaluation be conducted for potential on-site historic resources, and future development of project-specific mitigation measures, if warranted, to minimize impacts. Mitigation Measures E-2 through E-5 require future site-specific archaeological surveys and assessments as warranted by sensitivity, and collection and documentation of recovered resources, if any. Similarly, Mitigation Measures E-6 through E-8 require monitoring, recovery, and documentation of any recovered paleontological resources. Mitigation Measure E-9 requires consultation with the County Coroner and Native American tribes in the event human remains are encountered during project implementation. These measures are intended to preserve on-site cultural resources and would not have any secondary adverse effects either on- or off-site.

6. Geology/Soils

Mitigation Measure F-1 requires that the proposed project be designed in a manner that adequately addresses the geologic and conditions at the project site in a manner that is consistent with building regulations that protect the public safety. Specifically, this measure requires soil testing to determine potential for collapse, and remedial measures such as on-site soil recompaction or specialized foundation design to avoid potential geologic hazards to structures. This mitigation measure would only affect future on-site development and would ensure seismic safety for future residents and building occupants, and would have no additional effects beyond those evaluated in Section 4.F, *Geology and Soils*, of this Draft EIR.

7. Greenhouse Gas Emissions

Mitigation Measures G-1 and G-2 require that vehicle trip reduction programs be implemented on-site for future businesses and schools, which would result in reduced greenhouse gas emissions. These measures would reduce impacts to the environment through reducing emissions sources and would not have any adverse secondary effects.

8. Hazards and Hazardous Materials

Mitigation Measures H-1 through H-4 are mitigation measures from the City's 2003 General Plan EIR that require that land uses that use, store, or handle hazardous materials be located away from sensitive uses, that hazardous materials management and response programs are implemented in the City and coordinated with the San Bernardino County Fire Department/Fontana Fire Protection District, and the City identify and designate appropriate truck routes within the City for transport of hazardous materials. Mitigation Measures H-5 through H-11 require further site-specific hazardous materials assessments for future development projects, sampling and analysis of site soils to determine the potential presence of hazardous materials, development of a soil management plan for future construction, debris removal from the site, and records review to confirm compliance with known hazardous materials generators (on-site dry cleaner). Mitigation Measures H-12 and H-13 relate to emergency response and evacuation plans and require that

traffic control plans and physical traffic measures be implemented during construction activities to allow unobstructed emergency vehicle access throughout the site. Thus, implementation of hazards and hazardous materials-related mitigation measures would not result in significant secondary effects.

9. Hydrology and Water Quality

Impacts regarding hydrology and water quality are less than significant and no mitigation measures are required. Therefore, no secondary impacts would occur due to the implementation of mitigation measures for this environmental topic.

10. Land Use

No mitigation measures are feasible with respect to land use that could reduce the severity of impacts relative to consistency with land use plans, policies, and regulations. As such, no potential secondary effects would result.

11. Noise

Mitigation Measure K-1 requires that future project-specific noise analyses be performed for on-site development projects, and physical or other mitigation measures to reduce noise, such as sound walls, insulation, noise reducing windows, or other features be implemented as appropriate. Therefore, no secondary impacts would result.

12. Population and Housing

Impacts related to population and housing would be less than significant and therefore no mitigation measures are required. As such, no potential secondary effects would result.

13. Public Services

Mitigation Measures M-1 through M-27 are measures from the City's 2003 General Plan EIR that are applicable to the proposed project. Mitigation Measures M-1 through M-3 require that the City maintain its fire protection service rating and emergency response times, as well as provide new and expanded fire facilities to meet anticipated growth in the City. Mitigation Measures M-4 through M-12 require that the City maintain police response times and service ratios, and continue to implement various education, outreach, and public safety programs within the community. Measures M-13 to M-18 require the City to coordinate with area school districts regarding opportunities for joint-use facilities, future school site planning, payment of school developer fees, and education programs and community activities. Mitigation Measures M-19 through M-25 require that the City provide a variety and adequate supply of parks and recreational facilities to meet the needs of the community, and that parks are accessible, safe, and well designed. Mitigation Measures M-26 and M-27 require that the City continue to coordinate its library services with surrounding school districts and evaluate methods of expanding library services through staffing strategies, technical advancements and facilities design. Implementation of these mitigation measures would not cause secondary effects beyond those discussed in Section 4.M, *Public Services*, of this Draft EIR.

14. Transportation/Traffic

Mitigation Measures N-1 through N-11 require physical improvements to the area traffic system which would serve to reduce vehicular congestion and other secondary impacts such as mobile-source air pollution and noise. While construction of such improvements would result in temporary construction-related impacts, these facilities would be constructed as necessary throughout Specific Plan implementation over many years, and therefore incremental traffic system improvements would be considered a component of the individual development projects that trigger the need for each improvement. As such, the impacts of individual traffic system improvements as part of future development projects on-site have been evaluated Section 4.C, *Air Quality*, Section 4.K, *Noise*, and Section 4.N, *Transportation/Traffic*, of this Draft EIR and no additional secondary effects would occur. Mitigation Measures N-12 and N-13 require that adequate sight distance and proper striping be provided to minimize traffic safety hazards on-site, which would not cause any adverse secondary effects. Mitigation Measure N-14 requires that adequate parking supply for each future development project on-site be provided, which would minimize potential parking supply impacts and would not result in additional effects beyond those evaluated in Section 4.N, *Transportation/Traffic*, of this Draft EIR.

15. Utilities and Service Systems

Mitigation Measures O-1 through O-15 are measures from the City's 2003 General Plan EIR that are applicable to the proposed project. Mitigation Measures O-1 through O-5 require the City to minimize water consumption through conservation and public education programs, protection of drinking water quality, and collaboration with water suppliers to ensure adequate supplies and increase efficiency. Mitigation Measures O-6 through O-9 require the City to update the Sewer Master Plan, maintain the municipal sewer system, collaborate with the Inland Empire Utilities Agency (IEUA) regarding wastewater services, implement a recycled water program. Mitigation Measures O-10 through O-15 require construction waste recycling, continuance of ongoing recycling programs in the City, provision of City waste management services, and public education and outreach. These measures would reduce the consumption of water, the generation of wastewater, and solid waste disposal rates, and therefore no secondary adverse effects would result from their implementation.

F. EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the *CEQA Guidelines* states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and not discussed in detail in the Draft EIR. An Initial Study was prepared for the project and is included in Appendix A of this Draft EIR. The Initial Study provides a detailed discussion of the potential environmental impact areas and the reasons that each topical area is or is not analyzed further in the Draft EIR. The City of Fontana determined that the project would not result in potentially significant impacts related to Aesthetics, Agricultural Resources, Biological Resources, Cultural Resources (Historic Resources), Mineral Resources, Population and Housing, and Utilities (Solid Waste and Other Utilities and Service Systems). The basis for these conclusions is discussed below.

1. Aesthetics

None of the roadways adjacent to and in the vicinity of the project site are designated as a scenic highway. As indicated in the General Plan, there are no designated Official State Scenic Highways in the vicinity of the

project site. The nearest State Scenic Highway, Route 18, is located near Big Bear Lake approximately 40 miles from the site, such that current views experienced from the roadway would not be affected by any development that would occur on the project site.[1] In addition, no valued natural features (i.e., rock outcroppings), or other notable features exist within the site, as the site has been altered through its historical agricultural use, leaving little or no native vegetation. Therefore, implementation of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

2. Agricultural and Forestry Resources

The project would not conflict with the existing zoning for an agricultural use, as the site is currently zoned for urban uses as part of the adopted 1996 Westgate Specific Plan. Additionally, no portion of the project site is enrolled in a Williamson Act Contract. Thus, no impact would occur.

Project implementation would not result in changes to or cause rezoning of forest land, timber land or timberland zoned for Timberland Production. In addition, the project area does not include areas zoned or utilized for timberland production. Thus, no impact would occur in this regard.

No forest land exists in the project area. As such, the project would not result in the loss of forest land or conversion of forest land to non-forest use and no impact would occur in this regard.

3. Biological Resources

The project site is undeveloped and was historically used for agricultural production and therefore no substantial stands of trees exist within the Specific Plan area; however, several trees, including oak trees, exist in a number of areas within the Specific Plan area. Several of these trees may be subject to the requirements of Chapter 28 of the Fontana Municipal Code (FMC), which established provisions for the removal, replacement, or relocation of heritage, significant, and specimen trees. Based on the criteria presented in Chapter 28 of the FMC, any tree removals required as part of the implementation of the Specific Plan would require that the applicant obtain a permit from the City and comply with any associated permit conditions in order to ensure that significant adverse impacts to protected trees do not occur. No other location policies or ordinances protecting biological resources are applicable to the site. As such, impacts would be less than significant in this regard.

4. Geology and Soils

Fault rupture is defined as the displacement that occurs along the surface of a fault during an earthquake. Based on criteria established by the California Geological Survey (CGS), faults can be classified as active, potentially active, or inactive.[2] Active faults are those having historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch).[3] Potentially active faults

[1] *California Department of Transportation (Caltrans), California Scenic Highway Program, (http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm) Accessed October 18, 2011.*

[2] *California Department of Conservation, California Geological Survey. "California Geological Survey - Alquist-Priolo Earthquake Fault Zoning Act," http://www.consrv.ca.gov/cgs/rghm/ap/Pages/main.aspx#what_is_fault. Accessed October 4, 2011.*

[3] *Ibid.*

have demonstrated displacement within the last 1.6 million years (during the Pleistocene Epoch), but do not displace Holocene Strata. Inactive faults do not exhibit displacement younger than 1.6 million years before the present. In addition, there are buried thrust faults, which are low angle reverse faults with no surface exposure. Due to their buried nature, the existence of buried thrust faults is usually not known until they produce an earthquake.

The seismically active Southern California region is crossed by numerous active and potentially active faults and is underlain by several blind thrust faults. Alquist-Priolo Earthquake Fault Zones (formerly Special Study Zones) have been established throughout California by CGS. These zones, which extend from 200 to 500 feet on each side of a known active fault, identify areas where potential surface rupture along an active fault could prove hazardous and identify where special studies are required to characterize hazards to habitable structures.

The project site is not located within an established Alquist-Priolo Fault zone. The nearest active fault to the project site is the Sierra Madre Fault Zone (Cucamonga Fault), located approximately ½-mile to the northwest of the project site at its closest point.[4] Active faults with the potential for surface rupture are not known to be located beneath the project site. Therefore, the potential to expose people to impacts from fault rupture resulting from seismic activity during the design life of the buildings is considered less than significant.

The City of Fontana General Plan Safety Element indicates that the entire Specific Plan area is located within an area with low susceptibility to liquefaction given the depth the groundwater and relatively coarse nature of the alluvial soils under the site. Based on the low potential for liquefaction on-site, impacts in this regard are considered less than significant.

According to the City of Fontana's General Plan Safety Element, landslides of various sizes and types can occur within the foothills of the San Gabriel Mountains.[5] The majority of the landslides are primarily in the steep slopes to the north of the City boundary, which is underlain by granite bedrock. Given the distance of slope areas from the project site and relatively flat topography within the Specific Plan area, no impacts related to landslides are anticipated to occur.

The project site is not located in an area susceptible to landslides, liquefaction, or other ground failure. As such, impacts in this regard would be less than significant.

Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. As note previously, the project area is characterized by relatively coarse-grained alluvial soils that typically exhibit low clay content. Although not anticipated, expansive soils, if encountered within the project site, would be removed and/or replaced as part of standard construction practices pursuant to the City of Fontana and/or CBC building requirements. Therefore, project implementation would result in less than significant impacts associated with expansive soils and substantial risks to life or property would not occur.

[4] *City of Fontana General Plan Safety Element, 2003.*

[5] *Ibid.*

The project site is located in an urbanized area served by existing wastewater infrastructure, and therefore no septic tanks or alternative wastewater disposal systems would be required. As such, the project would not result in impacts related to the ability of soils to support septic tanks or alternative wastewater disposal systems. No impacts would occur.

5. Hazards and Hazardous Materials

Hazardous materials may be used during the construction phase of the project's development components. Hazardous materials that may be used include, but are not limited to, fuels (gasoline and diesel), paints and paint thinners and possibly herbicides and pesticides. Generally these materials would be used in concentrations that would not pose significant threats during the transport, use and storage of such materials. Furthermore, it is assumed that potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, including California Occupational Safety and Health Administration requirements, and Title 8 and 22 of the Code of California Regulations. Accordingly, risks associated with hazards to the public or environment posed by the transport, use or disposal of hazardous materials during construction are considered less than significant due to compliance with applicable standards and regulations.

Over the long-term, the project would not involve facilities that include substantial storage, use, disposal, or generation of hazardous materials or wastes. However, ongoing landscape and building maintenance activities may involve the occasional use of hazardous materials. Potentially toxic or hazardous compounds associated with maintenance activities typically consist of readily available solvents, cleaning compounds, paint, herbicides, and pesticides. These hazardous materials are regulated by stringent federal and state laws mandating the proper transport, use, and storage of hazardous materials in accordance with product labeling. The use and storage of these substances is not considered to present a health risk when used in accordance with manufacturer specifications and with compliance to applicable regulations.

Overall, construction and operation of the project would result in a less than significant impact with regard to routine transport, use, or disposal of hazardous materials relative to the safety of the public or the environment.

The project area is not located within two miles of a public airport or public use airport. The Ontario International Airport is located approximately five miles southwest of the project area. The project area is not located within the boundary of any airport land use plan and would therefore not result in a safety hazard for people using the project area. Thus, no impact would occur in this regard.

There are no private airstrips in the vicinity of the project area. Therefore, the project would not result in airport-related safety hazards for the people residing or working in the area. No impact would occur in this regard.

The project site is not located in an area that has a significant amount of vegetation and is characterized by relatively flat topography. Although sloped areas with extensive vegetation are located to the north of the project site in the San Gabriel and San Bernardino Mountains, these areas are located at a sufficient distance from the project area that they do not pose a substantial risk to people or structures on-site. Furthermore,

future development on-site would be subject to all applicable standards and regulations related to fire protection and prevention such that wildland fire hazards would be less than significant.

6. Hydrology and Water Quality

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of the sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

The project area is not subject to tsunami hazards given the distance from the Pacific Ocean and elevation of the project area relative to sea level. No open reservoirs or other large water bodies are located within or upstream of the project area. Therefore, the project would not be subject to flooding hazards associated with seiches. Additionally, despite the steep hillsides of the foothills to the north of the project area, the potential for mudflows to affect the proposed uses would be negligible given the distance of the mountains from the project and amount of intervening development. Furthermore, the gently sloping topography of the project area is not conducive to sustaining mudflows.

Based on the above, no adverse impacts associated with inundation by seiche, tsunami, or mudflows would occur with project implementation.

7. Land Use and Planning

While there are several developed residential, commercial, and public facility uses within the project vicinity, no established communities are located within the project area that could be physically divided by Specific Plan implementation. Therefore, no impacts related to the physical division of an established community would result from the proposed project.

The project would have no potential to conflict with any Habitat Conservation Plan or Natural Community Conservation Plans, since no such plans have been prepared for the project area. As such, no impact would occur in this regard.

8. Mineral Resources

According to the Fontana General Plan Open Space and Conservation Element, there are no known local mineral resources within the project area.[6] No known State-designated mineral resource areas have been identified within the project area. The project does not incorporate heavy industrial uses of any type or propose mineral development activities. Further, implementation of the project would not impede the potential for direct use or future exploration of mineral resources. Therefore, the project would result in no impact regarding mineral resources.

[6] *Fontana General Plan Open Space and Conservation Element. October 2003.*

9. Noise

The project area is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport, Ontario International Airport, is located approximately five miles to the southwest. Therefore, project implementation would not expose people to excessive airport related noise levels. No impact would occur in this regard.

The project area is not located within five miles of a private airstrip. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from such uses. No impact would occur in this regard.

10. Population and Housing

Project implementation would not displace existing housing or people. Therefore, no impact would occur to existing housing or local populations such that construction of replacement housing would be necessary.

11. Transportation/Traffic

The project does not propose any structures that would interfere with air traffic patterns; nor would the project increase use of any airport. Thus, no impact regarding air traffic patterns would occur with project implementation.

12. Utilities and Service Systems

a. Solid Waste

Solid waste collection from the project site would be managed by the Department of Public Works' Solid Waste and Recycling Program and the City's contractor, Burrtec Waste Industries (Burrtec). The City had a 50-percent waste diversion rate in 2006 through recycling and other measures and is in compliance with the California Integrated Waste Management Act of 1989 (AB939).[7] The proposed project would comply with applicable regulations related to solid waste, including those pertaining to waste reduction and recycling. As all solid waste collection from the project site would be managed by Burrtec, which is in compliance with federal, state, and local statutes and regulations, the proposed project would be consistent with respective regulatory measures.

G. ENERGY CONSERVATION

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and – perhaps most importantly – promote energy efficiency through the adoption and enforcement of appliance and

[7] *CalRecycle. "Jurisdiction Profile for City of Fontana." http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID =160&JUR=Fontana. Accessed November 9, 2011.*

building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines. Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below, this EIR concludes that the proposed project will not result in the wasteful, inefficient and unnecessary consumption of energy, will not cause the need for additional natural gas or electrical energy-producing facilities, and, therefore, will not create a significant impact on energy resources.

1. Energy Requirements of the Proposed Specific Plan

Adoption of the proposed Westgate Specific Plan itself would not result in changes to energy consumption patterns. However, development and land use activities that occur pursuant to the Specific Plan would consume energy. Below are discussions of short-term construction and long-term operational energy consumption and associated project features.

a. Short-Term Construction

Development and land use activities contemplated by the Specific Plan would include short-term construction activities that would consume energy, primarily in the form of diesel fuel (e.g., mobile construction equipment) and electricity (e.g., power tools}. It is not possible to reasonably estimate the amount of energy consumed by construction activities, as a number of hard-to-predict variables influence energy consumption (e.g., length of activities, size of buildings, equipment fleet, management practices).

There are no aspects to the Specific Plan that would foreseeably result in the inefficient, wasteful, or unnecessary consumption of energy during construction activities. For example, there are proposed land use types or unusual construction practices that would directly or indirectly cause construction activities to be any less efficient than would otherwise occur elsewhere (restrictions on equipment, labor, types of activities, etc.). Additionally, construction projects that occur pursuant to the Specific Plan would be subject to federal, state, and regional air quality rules and regulations.

In summary, the Specific Plan would not result in the inefficient, wasteful or unnecessary consumption of energy during construction activities.

b. Long-Term Operations

Development and land use activities contemplated by the Specific Plan would include long-term operational activities that would consume energy, both in the form of transportation fuel and building/equipment energy (e.g., electricity and natural gas). It is not possible to reasonably estimate the amount of energy consumed by operational activities, as a number of hard-to-predict variables influence energy consumption.

The Specific Plan establishes a goal that relates to operational energy consumption. Goal 9 of the Specific Plan is to develop a compact community to promote a healthy village character, enhance sustainability and conserve resources. Each of the four villages includes compact residential uses interconnected by bike lanes and pedestrian walks to parks, shopping and business uses. While this is intended to promote a healthy

community by encouraging residents to be more active and to reduce their reliance on the automobile, this also in turn reduces traffic and carbon emissions.

Westgate would also become one of the first large-scale planned communities in the Inland Empire region to meet one of the nation's first mandatory green building standards code (CalGreen). These comprehensive regulations were adopted by the State of California and went into effect as of January 1, 2011. By adhering to these regulations, the proposed Specific Plan would achieve significant reductions in greenhouse gas emissions, energy consumption and water use. Use of solar energy is encouraged throughout the community to conserve energy. All public parks will be required to incorporate solar lighting.

In order to further conserve resources, the proposed Specific Plan is designed to use recycled water for landscaping in public parks and rights of ways. The Specific Plan's infrastructure plans include a reclaimed water "purple pipe" system that would be installed as part of the major streets for all medians, parkways and public parks. Finally, there are no aspects to the Specific Plan that would foreseeably result in the inefficient, wasteful, or unnecessary consumption of energy during operational activities.

In summary, the Specific Plan would not result in the inefficient, wasteful, or unnecessary consumption of energy during operational activities.

7.0 References

7.0 REFERENCES

Bay Delta Conservation Plan. "Public Review". http://baydeltaconservationplan.com/PublicReview.aspx. Accessed March 2014.

Bies, David and Hansen, Colin, *Engineering Noise Control*, 1988.

California Code of Regulations, Title 24 Part 11, Green Building Standards Code, 2010.

California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, (2009) 12.

California Air Resources Board, *Air Quality and Land Use Handbook*, (2005) p. 4.

California Air Resources Board, Cancer Inhalation Risk, http://www.arb.ca.gov/toxics/cti/hlthrisk/cncrinhl/riskmapviewfull.htm.

California Air Resources Board, "Final Report – Adequacy of California Ambient Air Quality Standards," http://www.arb.ca.gov/research/aaqs/caaqs/ad-aaqs/ad-aaqs.htm. Accessed July 2014.

California Air Resources Board, "Nitrogen Dioxide – Overview," http://www.arb.ca.gov/research/aaqs/caaqs/no2-1/no2-1.htm. Accessed July 2014.California Air Resources Board, *Ambient Air Quality Standards, Air Quality and Land Use Handbook*, February, 2005.

California Air Resources Board, "Organic Gas Speciation Profile Reference Information," (09/20/12, Profile 818), and "CEIDARS Particulate Matter (PM) Speciation Profiles," (09/20/12, Profile 425), http://arb.ca.gov/ei/speciate/dnldoptvv10001.php. Downloaded 03/13/2014.

California Air Resources Board, Planning and Technical Support Division Emission Inventory Branch*, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (Assembly Bill 32)*, October 19, 2007.

California Air Resources Board, Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Part A Exposure *Assessment*, Approved by the Scientific Review Panel, (1998).

California Air Resources Board, Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines, (2003).

California Air Resources Board, South Coast Air Basin – Emission Inventory Data – 2012 Estimated Basin Data, http://www.arb.ca.gov/ei/maps/basins/abscmap.htm. Accessed October 2014.

California Climate Action Registry, Climate Action Leaders, http://www.climateregistry.org/about/members/climate-action-leaders.html. Accessed April 26, 2011.

California Climate Action Registry, *General Reporting Protocol Version 3.*1, 2009.

California Department of Conservation, Division of Land Resource Protection, "San Bernardino County Important Farmland 2010", Sheet 2 of 2. 2011.

California Department of Transportation (Caltrans), *Technical Noise Supplement* (TeNS), 1998.

California Department of Transportation (Caltrans), Transportation Related Earthborne Vibrations, page 4, February 2002.

California Department of Water Resources. (2003). California's Groundwater. Bulletin 118. Last update January 20, 2006.

California Department of Water Resources, Climate Change Adaptation Strategies for California's Water: Managing an Uncertain Future, October 2008. http://www.water.ca.gov/climatechange/docs/ClimateChangeWhitePaper.pdf.

California Department of Water Resources, Memorandum to All DWR Employees, "Sustainability Workgroup," April 22, http://www.water.ca.gov/climatechange/docs/Sustainability_Policy.pdf. 2009.

California Department of Water Resources, "Climate Change Characterization and Analysis in California Water Resources Planning Studies - Final Report," December 2010, page v.

California Department of Water Resources, "Progress on Incorporating Climate Change into Management of California's Water Resources," July 2006, page 2-54.

California Department of Water Resources, "Using Future Climate Projections to Support Water Resources Decision Making in California," May 2009, page 2.

California Department of Water Resources, Division of Statewide Integrated Water Management, Water Use and Efficiency Branch. Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use. October 1, 2010.

California Education Code Section 17620(a)(1).

California Environmental Protection Agency, Air Resources Board, *Greenhouse Gas Inventory Data - 2000 to 2008*, http://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed 2010.

California Environmental Protection Agency, Air Resources Board *Verification Procedure - Level 3,* http://www.arb.ca.gov/diesel/verdev/level3/level3.htm

California Government Code § 65996.

California Health and Safety Code §§ 39650 et seq.

California Public Resources Code § 5024.1(a).

California Public Resources Code § 5024.1(b).

California Public Resources Code § 5024.1(d).

California Regional Water Quality Control Board, Santa Ana Region. (2010, January 29). Waste Discharge Requirements for the County of San Bernardino and the Incorporated Cities of San Bernardino County, Order No. R8-2010-0036, NPDES No. CAS618036, Area-wide Urban Storm Water Runoff.

California State Water Resources Control Board, *20 x 2020 Water Conservation Plan*, February 2010. http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/docs/20x2020plan.pdf.

CalRecycle, "Jurisdiction Diversion/Disposal Rate Detail," accessed online at: http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=160&Year=2010, accessed September 2012.

CDM. (2011, June 28). Comprehensive Bacteria Reduction Plan. Submitted to California Regional Water Quality Board Santa Ana Region by the San Bernardino County Flood Control District.

CDM. (2011, July 28). San Bernardino County Stormwater Program Technical Guidance Document for Water Quality Management Plans (WQMP). Submitted to the California Regional Water Quality Board Santa Ana Region July 29, 2011.

City of Fontana. "Development Fees." Updated May 7, 2012.

City of Fontana Official Website. Community Services Department – Parks & Facilities. http://fontana.org/index.aspx?nid=157. Accessed July 2012.

Etiwanda School District. "School Developer Fees Effective July 10, 2012." http://www.etiwanda.k12.ca.us/busserv/DeveloperFees.pdf Accessed July 2012.

Federal Transit Authority, Transit Noise and Vibration Impact Assessment, Final Report, page 7-3, April 1995.

Fontana Police Department. "2011 Annual Report." Released 2012. www.fontana.org/DocumentView.aspx?DID=2277

Inland Empire Utilities Agency. "2012/2013 Annual Report." http://www.ieua.org/news_reports/docs/reports/2013_Annual_ Report.pdf. 2013

Inland Empire Utilities Agency. "2010 Urban Water Management Plan." June 1, 2011. http://www.ieua.org/news_reports/UWMP.html

Inland Empire Utilities Agency. "Facilities." http://www.ieua.org/departments/CAP/facilities.html. Accessed August 2012.

Inland Empire Utilities Agency. "Fiscal Year 2013/14 Operating and Capital Program Budget Volume 2: Ten-Year Capital Improvement Plan." http://www.ieua.org/news_reports/docs/2013/Fin/TYCIP_May2013.pdf. May 2013.

Inland Empire Utilities Agency. "IEUA Sewer System Management Plan." Revised April 24, 2012.

Kunzman Associates, Inc., Westgate Specific Plan Traffic Impact Analysis, (2013).

Larry Walker Associates. (2011, August). San Bernardino County Stormwater Program Integrated Watershed Monitoring Program (IWMP). Submitted to Santa Ana Regional Water Quality Control Board.

Metropolitan Water District of Southern California, Integrated Water Resources Plan, Report No. 1373, Updated http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/IRP2010Report.pdf. October 12, 2010.

Metropolitan Water District of Southern California. Regional Urban Water Management Plan, http://www.mwdh2o.com/mwdh2o/pages/yourwater/RUWMP/RUWMP_2010.pdf. November 2010.

Metropolitan Water District of Southern California Board Meeting September 11, 2007 Agenda Item 8-4, emphasis added.

Natelson Company, Inc., "Employment Density Study Summary Report" prepared for the Southern California Association of Governments (October 2001).

Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, (2003).

San Bernardino Associated Governments (SANBAG), "San Bernardino County Non-Motorized Transportation Plan," Figure 3.5, Bicycle Facilities – West Valley. March 2011.

San Bernardino County Fire Department. 2010 Annual Report. www.sbcfire.org/admin/AnnualReports/2010_Fire_Annual_Report.pdf

San Bernardino County Department of Agriculture/Weights and Measures. "2012 Crop and Livestock Report for San Bernardino County, California". 2013. http://cms.sbcounty.gov/Portals/13/CropReports/2012%20crop%20%20livestock.pdf. Accessed March 2014.

South Coast Air Quality Management District, AQMD Website, http://www.aqmd.gov/aqmp/2012aqmp/index.htm.

South Coast Air Quality Management District, *2003 Air Quality Management Plan*, Appendix V: Modeling and Attainment Demonstrations, (2003) V-4-24.

South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

South Coast Air Quality Management District, 2012 Air Quality Management Plan, http://www.aqmd.gov/aqmp/2012aqmp/index.htm.

South Coast Air Quality Management District, "Fact Sheet Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning," http://www.aqmd.gov/prdas/aqguide/fact_sheet.html. 2010.

South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, http://www.aqmd.gov/ceqa/handbook/lst/Method_fina.pdf. July 2008.

South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

South Coast Air Quality Management District, Historical Data by Year, http://www.aqmd.gov/smog/historicaldata.htm.

South Coast Air Quality Management District, Risk Assessment Procedures for Rules 1401 and 212, November 1998.

Southern California Association of Governments website: http://www.scag.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf. Accessed February 2014.

Special District Financing & Administration. "Fee Justification Report for New Residential & Commercial/Industrial Development" prepared for the Chaffey Joint Union High School District. April 2006.

State Of California, California Integrated Waste Management Board, Regional Water Quality Control Board. "Application for Solid Waste Facility Permit/Waste Discharge Requirements – Mid-Valley Landfill." May 2012.

State of California, General Plan Guidelines, 2002.

State of California, Office of Public School Construction, An Overview of the State School Facility Programs, February 2010.

The American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) Standard 52.2

Wildermuth Environmental, Inc. (2006). Depth to Groundwater Contours, Chino Basin Fall 2006. Retrieved September 7, 2012, from http://www.cbwm.org/docs/engdocs/maps/DTW_CBWM.PDF

Williamson and Schmid Civil Engineers. "County of San Bernardino Hydrology Manual," August 1986.

8.0 List of Preparers

8.0 LIST OF PREPARERS

LEAD AGENCY

City of Fontana
Development Services Organization
8353 Sierra Avenue
Fontana, California 92335

- *DiTanyon Johnson*, Associate Planner

ENVIRONMENTAL IMPACT REPORT PREPARATION

PCR Services Corporation
233 Wilshire Blvd., Suite 130
Santa Monica, California, 90401

- *Jay Ziff*, Vice President, Director Environmental Planning & Documentation
- *David Crook*, AICP, Principal Planner (Project Manager)
- *Brian Allee*, Senior Planner I
- *Greg Spalek*, Director of Graphic Services
- *Heidi Rous*, CPP, Vice President, Director of Air Quality, Climate & Acoustics
- *Kyle Kim*, PhD, Senior Acoustics Engineer
- *Everest Yan*, Senior Engineer
- *Alan Sako*, Senior Air Quality Scientist
- *Vivian Liao*, Associate Engineer
- *Steve Nelson*, Senior Vice President, Director of Biological and Regulatory Services
- *Amir Morales*, Principal Regulatory Scientist
- *Ceri Williams-Dodd*, PhD, Senior Biologist II
- *Margarita Wuellner*, PhD, Director of Historic Resources
- *Jon Wilson*, Senior Historian
- *Kyle Garcia*, Senior Archeologist
- *Matthew Gonzales*, Associate Archeologist
- *Terry Keelan*, Publications Director

Traffic and Circulation

Kunzman Associates
1111 W. Town and Country Road, Suite 34
Orange, California 92868

- *William Kunzman*, PE, Principal
- *Carl Ballard, LEED GA*, Principal Associate
- *Bryan Crawford*, Associate

Civil Engineering

Hall & Foreman, Inc.
17782 17th Street, Suite 200
Tustin, California 92780

- *John Hogan*, PE, CEO/Principal

Geotechnical and Hazardous Materials

Ninyo & Moore Geotechnical and Environmental Sciences Consultants
475 Goddard, Suite 200
Irvine, California 92618

- *John Jay Roberts*, PE, CEG, Senior Geologist
- *Jalal Vakili*, PhD, PE, Principal Engineer
- *Javier Perez*, REA, Project Environmental Scientist

Hydrology and Water Quality

Fuscoe Engineering, Inc.
16795 Von Karman Avenue
Irvine, California 92606

- *Ian Adam*, CPSWQ, Principal/Stormwater Manager

PROJECT APPLICANT

Unitex Management Corporation
6101 Cherry Avenue
Fontana, California, 92336

- *Douglas Ford*, Vice President

PCR Irvine
2121 Alton Parkway
Suite 100
Irvine, California 92606
TEL 949.753.7001
FAX 949.753.7002
PCRinfo@pcrnet.com

PCR Santa Monica
201 Santa Monica Boulevard
Suite 500
Santa Monica, California 90401
TEL 310.451.4488
FAX 310.451.5279
PCRinfo@pcrnet.com

PCR Pasadena
80 South Lake Avenue
Suite 570
Pasadena, California 91101
TEL 626.204.6170
FAX 626.204.6171
PCRinfo@pcrnet.com